



# **Activity Based Costing in its Organisational Context**

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*A thesis submitted in fulfilment of the requirements of the University  
of Adelaide for the Degree of Doctor of Philosophy*

**December 1999**

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## **Abstract**

Activity-based costing (ABC) is one of the changes in management accounting that has appeared as response to Relevance Lost. A Department within a government-owned electricity generator and distributor provides the setting to study the relationship of the implementation of a new accounting technology with the organisational context. The ABC implementation is seen in the context of broader international, national and local pressures on the electricity industry.

The ABC system could not be imposed on the organisation as a fixed concept, impervious to change within the organisation. The ABC system was itself changed over time as the owners of the system responded to organisational pressures and changes. By following the system over a period of time these changes have been tracked – from ABC as a strategic management tool to a transfer pricing system and finally to its demise. The failure of the system is linked back to the broader ABC failure literature.

An inductively derived model of the intentions behind the introduction and use of ABC is developed. The core concept is survival. Managers were moved to find avenues to survive change – a system such as ABC could contribute to this. Managers saw it as a tool for resisting pressure from senior managers to bring about more radical change and hence enable the survival of the section. At the same time the information provided by the system was expected to be useful to bring about greater efficiency and effectiveness and hence guarantee survival of the Department of the organisation. In both respects ABC was unsuccessful despite the large investment in it.

Finally the research is directed back to the role of accounting during organisational change. Accounting is often seen as problematic during change whereas in this research accounting is seen as beneficial or at least relatively benign. Several concepts of organisational change are used in order to provide theoretical triangulation.

## Declaration

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my thesis, when deposited in the University Library, being available for loan and photocopying.

Bruce Gurd

24 December 1999

## **Acknowledgments**

I would especially thank the staff of ETSA for giving their time to this research. I especially thank those who had shifted out of the organisation for giving their working time or fishing time to enable me to continue the research. No one ever turned me away.

I have appreciated the support of several supervisors. Dr. Helen Thorne, whose contribution and support I have valued over many years and who gave excellent direction and suggestions over the last two years despite her busy life. In particular I have appreciated her long suffering with my tortured English. Neil Lewis and Bet Roffey of Flinders University were good supporters in the challenging part of defining the research and the process.

Finally I thank my wife, Rosemary, for her support. I trust it has not robbed my family of too much critical time.

**Bruce Gurd**

24<sup>th</sup> December 1999



# **1 ABC in its organisational context: an important subject**

This chapter explains the motivation for the research. The first section explains the importance of management accounting research that makes context central rather than peripheral. The second section provides the argument for the importance of studying activity based costing, one of the most well-known management accounting innovations of the last fifty years. The third section then combines the first two parts by showing that activity-based costing research is another area where increased attention must be given to context. The fourth section provides the approach to the study. Sections five and six introduce the case study site – the monopoly supplier of electricity in South Australia, and in particular a Department within one of its two key divisions. The penultimate section provides an overview of the structure of the thesis, which is followed by the conclusion of the chapter.

## **1.1 Management accounting and its context**

The last decade has seen a significant increase in interest, and consequently change, in management accounting. In 1982 Robert Kaplan<sup>1</sup> challenged traditional management accounting approaches, claiming that they were helping to create an uncompetitive U.S. manufacturing sector. His subsequent book *Relevance Lost* (Johnson and Kaplan, 1987), co-authored with historian Tom Johnson, expounded the weaknesses or lost relevance of management accounting. Although management accounting had once been relevant, he argued, the change in business

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<sup>1</sup> See Macintosh 1994, p.203 for this historical note.

circumstances, the misuse of management accounting, and the lack of developments were all contributors to the sorry state of management accounting as it was taught and practised. Although the book primarily described the U.S. experience it triggered an international examination of traditional approaches to management accounting. Macintosh (1994) used the term the “Relevance Lost movement” for the school of thought that led to the development of new techniques which followed, such as activity-based costing (ABC).

Coupled with this re-evaluation of management accounting techniques there has been a call for management accounting researchers to understand more about accounting in practice. Kaplan (e.g.1993) has repeatedly called for more case study research to enable this. Researchers before the Relevance Lost movement and those unsympathetic with Kaplan’s stance have also sought understanding of accounting in practice. For example, Hopwood (1979, p.145) observed “...how little we know about the actual functioning of accounting systems in organisations”. There has been a significant amount of research published since Hopwood penned this which addresses the functioning of accounting in organisations. However much of this fails to consider the broadest impacts of accounting, often conceptualising context in a very narrow sense.

Kaplan and Hopwood appear to be calling for the same response from researchers. However because Kaplan comes from an instrumental view he seeks an understanding of how accounting can be improved in practice, and therefore context is not central. Accounting is perceived as a technical activity, needing to inter-relate to the organisation in such a way that the obstructions to the value of accounting are minimised. As a result, there is little engagement with the social. New accounting technologies such as activity-based costing (ABC) are seen as a response to the need for accounting to be more useful in practice. Roslender suggests that there is some self-awareness in the new management accounting but “only technical self-awareness” (Roslender, 1996, p.533).

Some management accounting researchers have shifted their view of accounting as narrow technical discipline to its social role and consequences. The oft cited Burchell paper (Burchell et al, 1980) has been followed by a stream of other writers (eg Hopwood, 1984; Hopwood, 1987; Puxty, 1993), although many researchers remain wedded to the traditional paradigm. From the viewpoint of management accounting Puxty (1993) raises eleven criticisms of this paradigm of management accounting research and practice:

1. It takes an organisational perspective – The optimum approach for an organisation is assumed to be that of the managers. The managerialist position assumes that managers know what is “good” for an organisation and are there to install such management accounting systems. The ABC tradition and the developments in cost management generally assume this, although chapter 2 shows that some research is being published which questions this.
2. It treats the organisation as a closed system - Interactions between sections of an organisation, between an organisation and other organisations and between an organisation and broader society are ignored or minimised. Puxty acknowledges that strategic management accounting tries to overcome this and the Kaplan agenda does bring in the context of the “the markets and technologies of today” (Puxty, 1993, p.10).
3. It has a technical orientation - There is an assumption that accounting is fundamentally beneficial to an organisation, or if it is harmful it is because it is badly done. The development of ABC is itself a testimony to the desire of academic accountants to improve accounting in practice. The contingency theory argument persists in finding the right techniques that match the organisation’s environment.
4. It is prescriptive – ABC, target costing, throughput accounting, cost of quality, and other management accounting techniques are prescribed as

“best practice”. The technical problems are sometimes ignored, the behavioural and social issues even more so.

5. It is ahistorical – The majority of research and review of practice is cross-sectional and ignores history, as one aspect of context. The historical evolution of systems in an organisation may be crucial to understanding the present.
6. It is apolitical – Management accountants have suggested that management accounting is outside of the province of politics – that it has no political impacts. Puxty notes that the very concept of accountability presumes hierarchy and hence power. Management accounting may change the allocation of resources and therefore power relationships.
7. It is rationalistic – Management accounting is seen as a system of rational calculation and decisions built on a belief that the economic is the most important element.
8. It is functionalist – The survival of management accounting techniques is seen to evidence their benefit. Long-standing techniques such as standard costing are assumed useful. The debate about the new management accounting often focuses on how many organisations use them. Although use is a necessary condition before a technique is viewed as useful it is by no means sufficient.
9. It is reductionist – Puxty suggests that management accounting is reductionist in focusing on the economic and by emphasising the impact on the individual. The broader social impacts and social world are excluded.
10. It is positivist – Researchers have typically had an objectivist world-view where generalisations are possible, and that research must focus on the measurable.
11. It is problem-centred – Accounting is viewed from an instrumental viewpoint – it is there to solve a problem and achieve an end. This produces

an optimistic view of accounting – that it is there to help produce stronger organisations. The unfavourable impacts because of the “solution” are ignored.

Broadbent and Guthrie (1992) have made a similar critique in the public sector accounting literature. They identify two features of “alternative research” in contrast to the assumptions of the traditional paradigm; the importance of context and the assumed power of accounting to bring about change.

In sharing the broad concerns that Puxty raised, some management accounting researchers have shifted their focus to the organisational and behavioural issues that arise with the implementation and use of ABC (Soin, 1996; Tagoe, 1996). This research study advances those understandings. The technical is not the focus. I have researched activity-based costing in an organisation but taking account of context in its broadest perspective. From the perspective of Broadbent and Guthrie’s (1992) framework my research is contextually technical accounting – assuming that organisational context is very important and that accounting is questionably powerful in bringing about change.

## **1.2 Why ABC research is important**

ABC has become an area of interest to practitioners and academics alike. ABC has developed from a system for improved product costing, into a methodology which now integrates new approaches to management like kaizen (continuous improvement), TQM, business process re-engineering and team based cultures. It has attracted substantial interest from both practitioners and academics. In the late 1980s and early 1990s there was a significant professional literature relating to the use of activity-based costing and activity-based management in publications such as the *Journal of Cost Management*, *Management Accounting (U.K.)*, and *Management Accounting (U.S.A.)*. As academic attention has shifted to this area, there is now a

developing research literature in the area, but there are still a range of issues relating to ABC that have not been researched.

The term activity based management (ABM) has been defined by the international body CAM-I as “A discipline that focuses on the management of activities as the route to improving the value received by the customer and the profit achieved by providing this value” (Raffish and Turney, 1991, p.6). This definition is deficient in that:

- It focuses as profit as the main outcome which is not the issue in not-for-profits and government activities. A broader range of outcomes is the focus.
- Managing activities could be detrimental to customer value if the management of activities is accomplished within “silos” and not from a process view, or if it is driven top-down (Johnson, 1992).
- Managing activities is not necessarily the route to improving values because it can be done in an internally focused way. Managing activities can only improve value if it is done within a holistic approach of focus on strategic and long-term goals, and in meeting the needs of all stakeholders – owners, customers, employees and broader society.

In the next chapter I will develop the idea of activity-based costing. In both academic writing and professional writing the terms activity based costing and activity based management have sometimes been used interchangeably. In this thesis the term ABC is used.

The majority of published papers in the 1980s concentrated on technical aspects, either being case studies of implementations or prescriptive statements of how ABC should be practised. Research focused on technical aspects such as cost driver relationships (Foster and Gupta, 1990) and the theoretical conditions for successful implementation (Noreen, 1991). The dramatic increase in both the academic interest

in the area and the number of organisations implementing ABC has produced much more research over the 1990s. This has included aspects such as reasons for implementation (Gosselin, 1995), implementation experiences (eg. Innes and Mitchell, 1990; Shields, 1995), decision-usefulness (eg. Swenson, 1995; Innes and Mitchell, 1990), and stages in implementation (Anderson, 1995). However, given the significant investment in terms of both financial outlay and organisational effort, there is not a great understanding of the long-term impacts of ABC on organisations focusing on issues such as managerial behaviour and organisational culture. This thesis starts to fill part of that gap in understanding. Even researchers working in the traditional paradigm would want to have more understanding of why despite large investments in ABC systems<sup>2</sup> these systems have been abandoned, or if they are still being used why they are not meeting expectations.

### **1.3 ABC in its organisational context**

I will argue in subsequent chapters that much of the current research treats ABC as a technical issue and gives inadequate attention to its social role and consequences. The narrow focus of the research into the impacts of ABC is reflected in the methods used. There is a lack of in-depth longitudinal case studies, which track over time the role and impact of an ABC system at all levels of an organisation. The existing literature may argue that there are distinct gains from the use of ABC but there is a shortage of analyses of long-run consequences, both intended and unintended.

I have used the idea of organisational context, in the broadest sense, to mean the internal and external environment in which the organisation operates. It includes the internal features of the organisation such as culture, structure, internal accountability

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<sup>2</sup> Which in Australia have often exceeded \$(A)300,000

and boundaries. It also incorporates the external features, both local, national and international such as market pressures, external accountabilities, and public perception.

Seeking deeper understandings of the impact of accounting may commence with understanding the reasons for implementing ABC. Evidence from other areas of accounting research demonstrates that techniques which appear to be introduced from the perspective of efficiency and resource utilisation may have impacts on power relationships (Covaleski and Dirsmith, 1986). This is likely to be true of ABC where new understandings of cost relationships may change the view of the performance of segments and/or the products or services of an organisation. This may reduce the power of some organisational participants, and change the perceptions of the achievements of members of an organisation. There may be unintended consequences of accounting change, “...*the consequences of accounting do not necessarily have a close and automatic relationship with the aims of the name in which it is introduced*” (Hopwood, 1984, p.185).

Nahapiet (1988) argues that “... *accounting both shapes and is in turn shaped by organisational reality*” (p.333). ABC may shape an organisation by changing the decisions (Swenson, 1995), the organisational culture (Soin, 1996), and strategy (Tagoe, 1996). On the other hand an organisation may shape ABC by changing the concept of ABC in practice by changing the objectives, development and use of ABC during an implementation (Thorne and Gurd, 1999).

Nahapiet (1988) also looked at the way accounting was shaped by organisational change, a topic not frequently investigated. There is more attention to how accounting is involved in organisational change than how organisational change impacts on accounting. Preston et al (1992) similarly addressed the issue of the fabrication of accounting as they traced how a management budgeting system emerged in an organisational context. They suggest that “little is known of how accounting systems are created and developed” (Preston et al, p.561).

The contingency theorists can hypothesise the combination of features of accounting systems that match organisational factors. They are unable to explain how accounting systems are transmuted by organisational or environmental change. It is then possible for the range of outcomes postulated for a system such as an ABC implementation to be lost in rapid changes that engulf an organisation. Another area researchers are now seeking to explore is the reasons for the apparent failure of ABC despite the large investment in time and resources. Researchers using cross-sectional surveys may explain some of the reasons, but for richer explanations there is advantage in building from a perspective of context.

#### **1.4 Approach to the study**

I have chosen the first person for the communication of the research results. This was essential because of the nature of the research. To write in the third person passive voice might imply that this is an objective account of an objective reality. But this is my story. A different scholar with a different life experience and a different theoretical lens would have observed different things and written a different account<sup>3</sup>. I cannot accept that this makes this an unreliable or unworthy account. My goal has been to be sufficiently involved in the research setting that I have listened to enough voices to not present an account which contradicts the experience of the participants in the organisation. I have made every attempt to go beyond their experience. I have also brought theoretical perspectives to bear to enrich the understanding. I can only confess to the account being partial. There may have been issues of importance that have been neglected – it is difficult to capture the richness of organisational life in a thesis which concentrates on one issue.

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<sup>3</sup> As Ezzamel (1994, p.238) acknowledges “the use of a different theoretical framework to analyze this case study could yield different valuable insights”.

Pseudonyms have been used for actors in the research setting to preserve anonymity. To create the realism of the situation they are given names. I started by using Interviewee 5 or Manager 2; but this was too stark and clouded the picture of the personalities. In some places the quotations are too personal to ascribe even by a pseudonym, with the possible risk of any reader of the thesis deciphering the labels.

This research is also my journey – a journey of changing research positions and growth as a researcher. Eighteen months was spent working in the literature before I “risked” entering the field. I started as a grounded theory researcher, without fully understanding the traditions and assumptions of it. I changed during the research. In chapter 4, I explain this process of development of a clear theoretical position, including my need to move beyond pure grounded theory to analyse the historical and social forces acting on the participants. In particular I have changed in more candidly admitting my subjectivity as a researcher. I have taught this in Research Methods courses but it is forcibly learnt in practice - the research setting is changed by the researcher. The research changes the researcher – if the experience is worth anything it will challenge beliefs and help form new ideals and goals.

## **1.5 A unique opportunity: ETSA**

I was fortunate in this study to be able to find a suitable site for a longitudinal study in a support department of a division of The Electricity Trust of South Australia (ETSA), the monopoly supplier of electricity to all consumers, industrial users and households, in the state of South Australia. This site was chosen for two key reasons:

1. the majority of ABC studies have been in the manufacturing sector and there is a lack of understanding of the impact of ABC in service industries. I was interested in redressing this balance by finding a service organisation.

2. it provided an opportunity to engage in a medium term longitudinal study. There was an excellent opportunity to absorb myself in a situation and collect whatever data I wanted to. The manager was willing to give me almost unfettered access to staff; and collect data through interviews, observation of meetings, discussions, sitting in the cafeteria talking to staff and written material including memos, minutes, and letters. This degree of access is nor easy to arrange. I was also able to stay there as long as I wanted, and the Manager's successors continued this courtesy. I was involved in the organisation from late 1993 to 1997.

As it turned out, the rapidly changing public sector provided a rich field of inquiry as to the broader role of accounting, and especially an accounting technology like ABC, during organisational change. During the period of the study ETSA went from a public sector organisation with the possibility of merging with a government department to three government owned corporations. At the time of the completion of the thesis ETSA had become the subject of intense political debate. The South Australian government tried to pass legislation for the privatisation of ETSA, and finally got members of the Opposition party to defect in order to pass legislation to lease its assets to a private organisation.

In 1993/94 ETSA was the largest government business enterprise in South Australia, with revenue of approximately \$900 million. From the perspective of revenue it was the sixth largest business with its head office in South Australia (Commission of Audit, 1994, p263). Historically ETSA's functions had included<sup>4</sup>:

1. building and maintaining electricity generators, with both gas-fired and coal-fired power stations.

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<sup>4</sup> Report of the South Australian Commission of Audit, p.263.

2. purchasing electricity through a link to the Australian national grid, principally from Victoria, the neighbouring state on the east.
3. distributing of electricity including the building and maintenance of substations and transmission lines.
4. providing a customer interface including metering and billing.
5. licensing of equipment and electrical contractors.

ETSA was a vertically integrated supplier with a full range of support functions - payroll, human resources, accounting, and marketing. Its organisational chart in 1993 is shown in Appendix B. It grew as an organisation, right up to the mid-1980s, because it was expanding its major transmission network to unserved areas throughout the state of South Australia, which has a total area of nearly a million square kilometres. It was also expanding its network throughout the new residential and industrial sub-divisions of the capital city of Adelaide. In ten years (1951-61) 12,700 kilometres of transmission line was constructed (ETSA Annual Report, 1961).

## **1.6 “the Department” – a brief background**

The Department of ETSA which was the focus of this study (hereafter called ‘the Department’) was a service provider to other parts of the organisation. It was formed through re-organisation in 1991. At the start of the study it employed over 600 people. At the end of June 1994 a substantial number of employees left the organisation because of Voluntary Separation Packages (VSP’s). This included five of the eight section managers, of the Department. In addition another section manager was transferred to head office. By June 1996 the Department was down to 200 employees and at the end of the case study in December 1997 had only 145

employees, although approximately 30 had been transferred to other departments, sometimes taking their work with them.

As a service provider it was in a unique position, as there were some pockets of specialised expertise which were not available elsewhere in South Australia. The rest of the Department consisted of technical people whose skills were generally available and could be readily out-sourced. The Department felt under threat, and history proved that threat to be real.

The organisational chart for the Department at the start of the research in January 1993 is depicted in Appendix C. There were a series of six operational sections and two staff departments – human resources, a group of two, and accounting, a group of three. Each of the operational sections had a manager. They ran their sections as partially devolved entities within the Department. These section managers frequently had staff and assets in several locations, including rural areas. Each section manager had their own organisation with supervisors under them taking a position of accountability. These section managers and the supervisors and senior technical people below them formed a management team within the section. Each section manager had access to an accountant, because they had to prepare their own budget and manage their financial outcomes. It was too costly for each section to have their own accountant so accountants were shared across sections.

Some background to the people in the Department is important. Ted, the Manager, was an enthusiastic manager from a strong engineering background. He was a likeable and warm person. While he may well have had his detractors, I found none as I moved around the Department. His staff believed that he genuinely cared for the employees in the Department. He knew most, if not all, of the staff by name. He would stop and ask a previously injured worker how the injury was healing with a real concern about the well-being of employees. While his staff may have been negative about ETSA, their anger focused on “No.1”, the Head Office at No.1 Anzac

Highway, not their Manager. Employees with strong union affiliations did not speak ill of him.

While keeping a strong commitment to his staff, Ted had a close affiliation with and commitment to the reformation of the previous Chief Executive, Robin Marrett. After Marrett's departure, he was still working to the script that Marrett had laid out. It was a belief in a rational change process, by which ETSA could be transformed from a bloated unhealthy organisation to a successful efficient supplier of electricity meeting its customers' needs. Ted hoped to change the Department into such an efficient supplier of services that it could be kept within ETSA in the long-term or sold to a private organisation and kept running in its identical form. His hopes were never realised. Although he was an excellent operator he did not read the politics of the organisation well. He was eventually forced out of the organisation before he was ready, and while he believed he could still make a contribution.

The managers below Ted were an interesting mix of backgrounds and personalities. Most of the section managers had been with ETSA for a long time. As with many staff they had joined from school or soon after finishing engineering degrees and had been with the organisation thirty years. There was a degree of cynicism about the future of ETSA and the way it was currently being managed. As stated many took packages and left early in the research in June 1994. Upon their departure the re-organisation of the Department relied on bringing up some of the senior technical people into management positions and consolidating the sections to take on a broader range of functions. By early 1995 the organisation chart had been dramatically altered and is shown in Appendix D.

In 1995 Ted departed for "Special Projects". His replacement, Victor, was willing for my research to continue. However he did not enjoy widespread support. He was perceived as a person who would be more compliant with senior managements' wishes. Even he did not have a permanent hold on his position and acting managers filled his post for a time while he was called on to pursue other tasks.

There still appeared to be some spirit of camaraderie and belonging when I entered the Department. People leaving on packages and the transfers out of the Department into other areas of ETSA meant that by the end of 1997 there appeared to be little spirit left in the Department. Some of the “old-timers” kept up their contacts in the remnant of the close network that formally existed. Camaraderie seemed to be left to the get-togethers of ex-ETSA staff who relived the good days and bemoaned the new directions.

This is then a story of human experience in which peoples’ lives were irrevocably affected. I reflect upon this experience in the conclusion. I have tried to capture the range of human emotions in the Department - anger, satisfaction, disinterest, fulfilment, and despair.

## **1.7 Structure of the Thesis**

In the next chapter I review the accounting and management literature in ABC. In particular I note the need for more longitudinal studies, where the researcher is able to observe the impacts of ABC over time and explore a rich context.

As the research progressed it became clear that organisational change was a major issue. Therefore, chapter 3 became a review of the literature on the role and impact of accounting during organisational change. Several frameworks used in past research on this subject are analysed. They include Laughlin’s (1991) framework of change, boundary maintenance theory, Giddens’ structuration, and labour process theory.

Chapter 4 explains the research method used in the thesis. The chapter provides a critique of grounded theory research as currently practised in accounting.

The following chapter describes the history and organisational context of ETSA. This is critical to the rest of the thesis because I believe that accounting systems need to be studied in the broad contexts in which they operate. ABC does not have to be seen just as a response to micro-level local forces, but within a national and international pressure to bring about change.

There are then three key chapters that cover the analysis of the case study, which make a contribution to accounting research. The first of these, chapter 6, is the story of the implementation of ABC and a study of the ABC system over time. It demonstrates the way accounting is shaped by a changing organisational context. ABC started as a strategic management tool to be used to improve both efficiency and effectiveness and therefore provide new strategic focus. Then it largely was used as a transfer pricing system until a new CEO of ETSA abandoned transfer pricing. The champion and principal supporters of the ABC system left the organisation and despite attempts to use the old ABC data, the system was dead. The end of this chapter links back to the ABC failure literature.

The second of the analyses' chapters develops an inductively derived model of the development of the ABC system. Managers' fight for survival was the core concept that emerged. The idea of managers engaging in systems change to enable survival does not appear to be common in the literature. In fighting for survival managers hoped that the ABC system could provide information by which they could prove that the Department deserved to exist. They were also using that same information to encourage change amongst the workers within the Department so that the Department could survive as a separate entity. Despite their hopes the avalanche of change could not be stopped.

The final chapter of analysis, Chapter 8, links the ETSA case back to other accounting research about accounting and organisational change. I establish links to a literature concerned about how accounting is implicated in the change process. Much of this literature sees accounting as problematic, almost as a tool of

management to bring about change. In the ETSA case, managers see accounting as a useful tool in combating change. Three particular models are used to show how accounting and particularly ABC was involved in organisational change. The different understandings from each perspective are compared.

The last chapter draws together the conclusions from the research. This includes personal reflections as well as a future research agenda.

## **1.8 Conclusion**

The interest in ABC systems has given researchers impetus to investigate the impact of this approach but, despite the amount of published research in ABC, there are still many aspects of ABC not studied. As management accounting research has been criticised for not addressing issues of context, my research was motivated by the desire to follow an ABC implementation over a medium time frame. Context was put at the centre of the research rather than the periphery. An expectation was formed from the work of Nahapiet (1988) that ABC might be seen to shape an organisation and in turn ABC might be shaped by the organisation.

## 2 Activity Based Costing: A Review of the Literature

The review identifies the gaps in the ABC literature which became the motivation at the time of the commencement of the research in 1993. The gaps originally identified in the literature at the start of this research still have only been partially addressed.

The concepts of activity-based costing (ABC) and activity-based management (ABM) are now well known in the literature. Refereed journals<sup>5</sup> and professional management accounting journals<sup>6</sup> continually publish literature in this area. The early published papers were often prescriptive, using an exemplar case to illustrate the validity of the technique. There is now a more substantial research literature in ABC which is also reviewed in this chapter. Even though the research literature has grown, Shields (1997) could only identify 4 ABC papers out of 152 management accounting research articles published by North Americans in six leading journals in the first seven years of the 1990s. This may reflect the perceived low-status of ABC research amongst journal editors as more research has been published in second tier journals such as *Journal of Management Accounting Research* and *Management Accounting Research*.

The chapter has three sections. The first explores the concepts and practices of ABC and ABM and presents alternative models of ABC/ABM. Some of the potential benefits are presented. The second section provides a review of some of the key

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5 eg. *Journal of Management Accounting Research*, *Management Accounting Research*, and *Management Accounting Research*

6 eg. *Management Accounting*, *Strategic Finance*

papers in the research literature in ABC. In the third section I provide a summary of the major criticisms of ABC. The fourth section outlines the deficiencies in the ABC literature at the start of the research, which provided the motivation for the research. In conclusion an explanation is given as to how the research study addresses the deficiencies that existed in the literature and therefore can add to the body of knowledge of ABC.

## **2.1 A Review of Activity Based Costing and Activity Based Management**

### **2.1.1 An overview of ABC**

It is now acknowledged that ABC is not a recent idea. The earliest published reference to ABC appears to be the entry in Kohler's Dictionary of Accountants in 1952 (as reported by Aiyathura, Cooper and Sinha, 1991). Evidence suggests that Kohler had developed and used a form of activity analysis at the Tennessee Valley Authority in the 1930s (Aiyathura, Cooper and Sinha, 1991). The first well-developed treatise on activity accounting was written by George Staubus in 1970 (Staubus, 1970), but appears not to have been very influential at the time. Historical reviews have now identified organisations such as General Electric using activity based costing in the 1970s (Johnson, 1992). The concept of activity based costing received much publicity in the 1980s principally due to the efforts of Robert Kaplan and Robin Cooper who were both then at Harvard Business School.

The 1980s interest in this concept initially focused on activity based costing and the early writings were records of implementations and the advantages organisations obtained from them. Published cases were product-costing implementations of activity based costing (ABC) (Cooper, 1985; Cooper, 1986; Cooper and Kaplan, 1988; Jeans and Morrow, 1989), developed with the intention of improving the allocation of overhead costs to products. As well as using the new product cost

information for improved strategic decision making such as pricing and outsourcing, it was argued that the cost drivers might be helpful for managing costs (Cooper, 1989). In particular, Johnson and Loewe (1987) took up the idea of using ABC to manage operations including the management of the second stage drivers. However the management of costs was not the key use of these systems.

The consulting community seemed happy to take on these new ideas, as did some members of the academic community. The weaknesses of traditional costing methods appeared obvious. Traditionally, product costing systems had used a volume-based factor such as labour or machine hours for allocating the general pools of overheads to products and services. Johnson and Kaplan (1987) argued that this was adequate when overhead cost was not a significant proportion of total costs and when the cost driver correlated well with overhead. Over time as production became more highly automated, overheads increased and labour, a frequent denominator of an absorption rate, fell. For example, Textronix Portable Instruments division, under its traditional costing system allocated its overhead on the basis of direct labour hours and yet direct labour only represented four per cent of their total cost (Jeans and Morrow, 1989, p. 44). It was argued that the potential for distortions was high, particularly as overhead application rates increased. The numerator of the overhead application rate, overhead, was growing and often the denominator, labour cost, was falling.

A UK survey of management accounting in advanced manufacturing environments, published by Consortium of Advanced Manufacturing International (CAM-I) in 1988, reported that nearly one third of the respondents used a single plant-wide overhead rate. This was often based on direct labour hours, even though the average direct labour proportion of total manufacturing costs was only twelve per cent. The US counterpart survey reported that a single plant-wide rate was popular among smaller companies, but larger companies with high overhead costs, also used single plant-wide labour based rate even though direct labour averaged fifteen per cent of total manufacturing cost (Drury, 1989, p. 60). A common move that these firms had

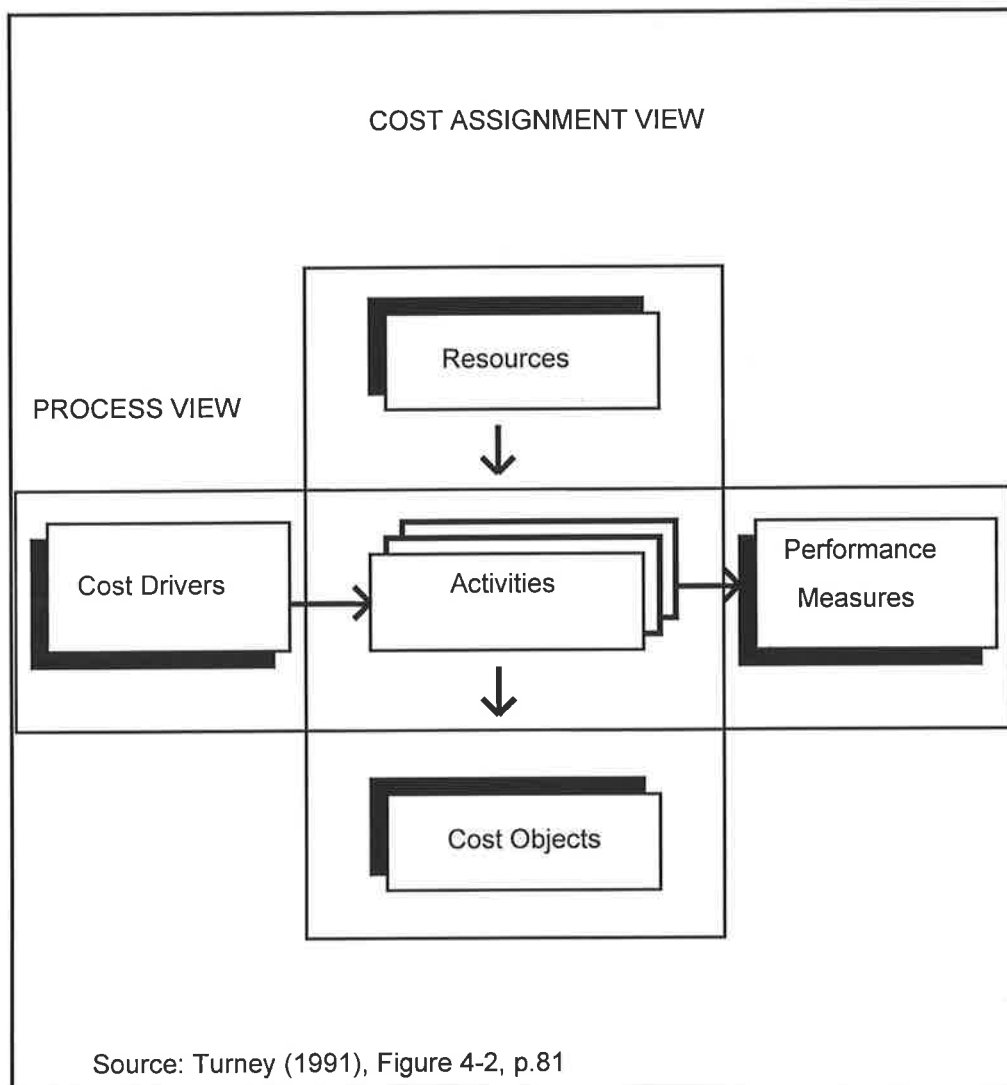
made in response to the new manufacturing environment was towards the use of machine hours instead of direct labour hour to allocate overhead costs. This recognised the increasing use of technology but did not solve the problems of using solely volume-based drivers.

Labour based allocations appeared unrealistic when direct labour hours had become such an insignificant amount for many companies. Even the move to machine hours was not seen as the answer as overhead costs were not just related to volume based factors such as labour or machine usage but to factors such as product complexity and the number of products.

Cooper (1988) observed differences in overhead reported by activity-based costing and volume-based cost systems. Low volume products were under-costed and high volume products were over-costed. High volume products tend to be simpler, longer production run, higher labour content products which drive less of the overhead structure but have more overhead allocated to them as a result of their higher labour cost. The concern of Cooper and Kaplan was that the cross-subsidisation of high and low volume products was encouraging United States manufacturers to drop the production of high volume labour intensive products and retain the low volume capital intensive products which were the real drivers of overhead cost. The early focus of ABC studies was factory overhead but this quickly extended to the more perplexing and larger area of administrative overheads.

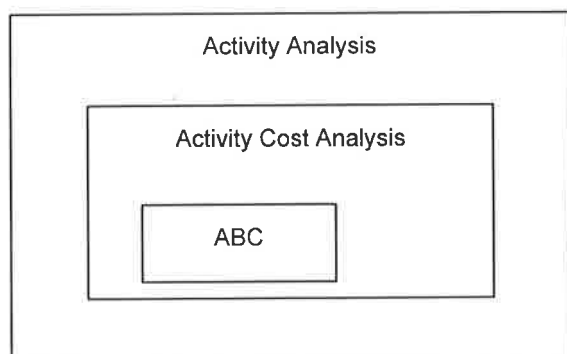
Implementations of ABC in the 1990s have focused on managing activities as well as costing them; hence the use of the term activity based management (ABM). Activity based management "...focuses on the management of activities as the route to continuous improvement..." (Turney, 1991, p.315). A full ABC system can therefore have at least two key objectives; improved product costing and better cost management. The literature presents a range of variants of ABC systems; it is this range of variants that illustrates that organisations are implementing these systems to meet their perceived organisational needs. Raffish and Turney (1991) developed the

ABC cross as shown in figure 2.1, which includes both a cost assignment view and a process view. The cost assignment view is concerned with the development of cost information for strategic decision-making; whereas the process view provides information for cost management. Although organisations may do one or both, the central objective of defining and measuring activities is critical to either.



*Figure 2.1 The ABC Model*

Gosselin (1997) has an alternative schema to what he calls activity management – which moves up from activity analysis to activity cost analysis to ABC.



*Figure 2.2 The three levels of activity management (Gosselin, 1997, p.106)*

In this schema activity analysis relates to activity identification and elimination of non-value added activities, similar to the connection of resources to activities of Raffish and Turney (1991). Activity cost analysis is the process of identifying cost drivers. The final stage is the development of full ABC product cost. Gosselin's structure suggests that organisations may move from developing and using activity data to then produce product cost. This ordering is not essential and therefore the Turney model is attractive. Product costing may precede the use of the activity analysis for cost driver analysis and may even precede some of the uses of activity analysis for cost management. It is difficult to see that ABC costing is the final stage. It is important then to appreciate the variety of ABC models as significant permutations have occurred over time (Langfield-Smith, Thorne and Hilton, 1998). There cannot be a single correct way of understanding ABC.

There are also a variety of uses of ABC in different organisations, such as for cost management or product costing purposes for strategic decision-making. These different uses potentially have incompatibilities (Thorne and Gurd, 1999). One way

of categorising the uses of ABC is the schema of Morrow and Ashworth (1994 p.33) which has been developed further in Table 2.1.

**Table 2.1 The Applications of Activity-Based Management**

application categorisation		description	business need trigger
performance measurement	internal	activity-based costing	to gain a better understanding of the cost of services/ products
		activity-based budgeting	to optimise the allocation of scarce resources across the business
	external	customer profitability analysis	to understand and manage the relative profitability and attractiveness of the customers
		supplier cost analysis	to understand and manage the relative cost and attractiveness of the suppliers
performance improvement	internal	activity mapping	to change the way things are done to attain to "world best practice".
	external	business process redesign	
		bench-marking	

Some of the uses of ABC information have therefore included:

1. Improved costing of services or products to make decisions including strategic directions, product mix and sometimes pricing;
2. Improved budgeting and hence resource allocation decisions;
3. Managing more successfully in the value chain by understanding and managing customer profitability and supplier cost;
4. The identification of and elimination of non-value added activities;
5. Business process redesign to reconfigure the relationship of activities and processes;

6. A team performance measurement system which gives each team goals for major activities and processes.

This list of areas of use and Table 2.1 primarily relate to technical aspects of the uses of ABC. However, subsequent sections show that there has been some research on the behavioural and organisational impacts including cultural change.

### **2.1.2 ABC in Service Industry and Government**

The emphasis in the mid 1980s was on manufacturing industries, perhaps reflecting Cooper and Kaplan's concern with the decline in the manufacturing base of the New England area in their immediate geographical proximity. The leading refereed journal covering ABC was called the Journal of Cost Management for Manufacturing Industry but later dropped the manufacturing label as the ABC literature broadened out to encompass service industries. Despite this change there are still significantly more ABC papers written from a manufacturing industry perspective. Service industries may be quite different from manufacturing organisations in their use of ABC, for the following reasons:

1. Overheads are even a higher proportion of cost and therefore are even more critical.
2. Non-repetitive activities are more common than in manufacturing industry. The attempt to find appropriate second-stage drivers of cost is therefore more difficult. Organisations which serve community objectives may find even more difficulty in finding second stage drivers because the outputs produced may be disputed.
3. Some service organisations have higher preponderance of professionals (eg. health care). There are likely to be particular issues because of the way these professional groups may try to protect their professional area from the intrusion of ABC.

Papers emerged in the early 1990s advocating ABC in the service sector (Rotch 1990; Sephton and Ward, 1990, Harr, 1990). More recently Ruhl and Hartman (1998) look at the use of ABC for cost management in the service sector - particularly financial services, healthcare, and insurance. They suggest that ABC has become particularly useful to understand cost relationships and see which services are more expensive to deliver.

There are now papers claiming successful applications of ABC for local, state and federal government departments and agencies (eg. Harr, 1990; Hoban, 1995; Kinghorn and Morgan, 1995; Neilson, 1998). In addition, there are practitioner papers for a variety of service industries, some of which are both in the public and private sectors in different parts of the world. These include health care (Baker and Boyd, 1997; Dowless, 1997; Stiles and Mick, 1997) and telecommunications (Bussey, 1993). Baxendale and Spurlock (1997) particularly investigate the potential uses of ABC in the electricity industry. Although the authors suggest that the process of deregulation would increase the need for ABC for product costing purposes; they focus on the use of ABC for cost management purposes as the sector responds to deregulation. Johnson (1998) also discusses ABC in the electricity industry and particularly focuses on the pricing issue, and the need to use ABC in the electricity industry to unbundle charges and be able to understand the specific costs of aspects of delivering electricity supply.

Moves to Outcome Based Budgeting in Australian state governments (Mason, 1998) and to contestability in local government are bringing about widespread adoption of ABC in government in Australia. For example it is now described as “current best practice” by the South Australian Department of Finance and Treasury (Department of Finance and Treasury, 1997, p.61), and as the preferred costing approach in Queensland (Queensland Treasury, 1997 as cited by Mason, 1998). The widespread understanding of ABC and recognition of its advantages in the public sector was not the case in 1993 when this research commenced.

In summary, there is now a significant literature relating to the implementation and use of ABC in a variety of organisations, including service organisations.

## **2.2 Research in ABC / ABM**

I have divided the review of the published research into areas of interest, although these divisions do not provide neat lines of demarcation. The first area relates to the technical problems of using ABC. This is followed by the factors that contribute to the adoption of ABC. The third area is the factors that contribute to the success or failure of ABC systems. This is followed by research into satisfaction with ABC systems and what satisfaction means. The final section discusses research into the behavioural and social consequences of ABC.

### **2.2.1 Technical Issues**

The focus on the improved costing accuracy of activity based drivers led to research which tested the relative importance of volume-based drivers compared to activity-based drivers. The first published paper in this area (Foster and Gupta, 1990) used 37 facilities in a single electronics company. They suggested that, for that firm, volume was the best explanatory variable of cost behaviour, contrary to the expectations of the importance of non-volume based drivers. This triggered further research into cost driver relationships including the work of Banker and Potter (1993) and cost driver studies in the airline industry (Banker and Johnston, 1993).

Modelling work suggested a limited range of circumstances in which ABC assumptions would hold true. A well-known paper in this genre is Noreen (1991). More recently Maher and Laurentius Marais (1998) have investigated the difference between the use of conventional and activity-based costing and have shown that both approaches provide poor approximations to actual expenditures. Using a simulation approach the authors look at the reduction in nursing resources required in the recovery room of a hospital because of changing anaesthetics. They show that whereas conventional costing under-estimates the savings, activity based costing

over-estimates the savings. ABC does not take account of joint and indivisible services and is inconsistent with the cost relationship of resource acquisition. These findings are consistent, however, with the work of Cooper and Kaplan who separate the demand and supply of resources (eg. Cooper and Kaplan, 1992).

## **2.2.2 Factors that contribute to the Adoption of ABC**

Research attention has also been directed at the “ABC paradox” (Gosselin, 1995). Although professional and educational programmes advocate the usefulness of ABC, few firms seem to take it up<sup>7</sup>. Gosselin (1995) looked at two factors - the impact of strategy on the desire to implement an ABC system in the first place, and the impact of organisational structure on the degree of implementation of ABC. As shown in Figure 2.2, Gosselin sets up three levels of activity management - activity analysis, activity cost analysis and ABC. He found that a prospector strategy was related to the adoption of activity management. Organic organisations were more likely to implement activity analysis and activity cost analysis but mechanistic organisations more likely to implement full ABC. The work of Bjornenak (1997) was directed at the issue of diffusion of ABC. Only one demand factor was mildly significant – cost structure. A number of supply side factors appeared more promising - factors such as company size and sources of information. Booth and Giacobbe (1998) built on Bjornenak (1997) to investigate demand and supply factors in Australian manufacturing firms. Three demand factors were identified:- the importance of overheads, product line complexity, and the ability to influence the market prices of its products. Although the importance of overheads did influence the search for improved costing systems, including ABC, it did not necessarily lead to implementation. Product line complexity was not found to be influential, but the inability to pass on costs through market prices did increase the

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<sup>7</sup> For the Australian experience see Booth and Giacobbe (1999).

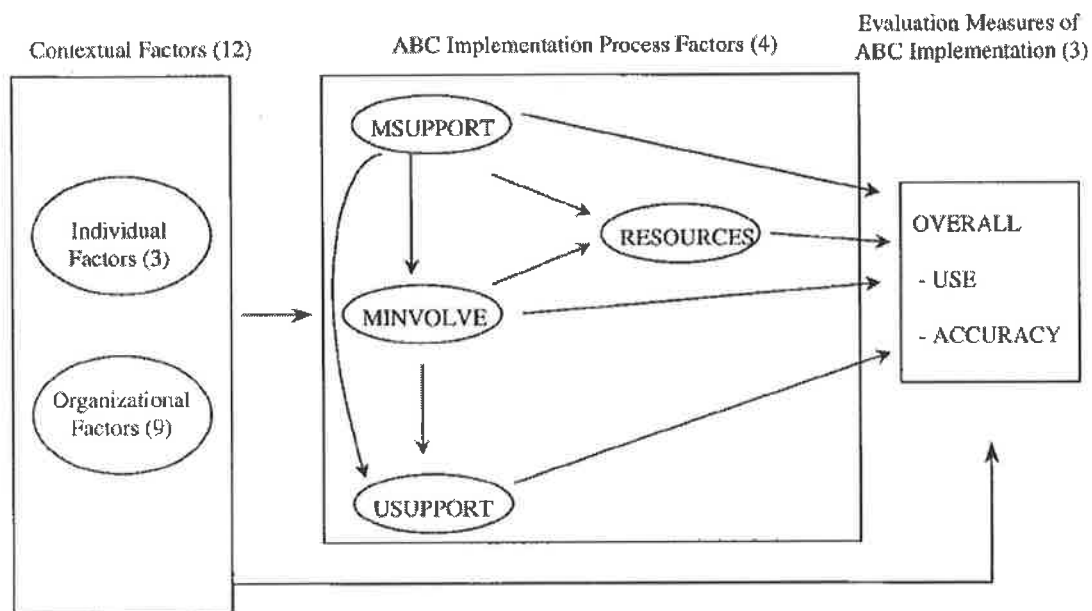
adoption of ABC as firms tried to manage cost in competitive market situations. On the supply side, only firm size was found to influence adoption. Another supply side variable, the use of consultants was mildly significant in relation to adoption of ABC as an idea; but Booth and Giacobbe (1998) recognise the need to do more work on this variable.

The relationship between strategy and the use of ABC was part of the work of Chenhall and Langfield-Smith (1998). They researched combinations of management and management accounting techniques with the strategies of differentiators and low-cost products. They identified activity based costing as one of the techniques that may be used in organisations pursuing a low-cost strategy. They found that contrary to their expectations activity-based costing was useful for differentiators, and suggested that it might enable them to understand which “value drivers” enhance product differentiation.

### **2.2.3 Factors that contribute to the success or failure of ABC**

Shields (1995) developed a model of implementation success with the variables being – top management support, links to competitive strategy and compensation, training and resources. In a broader analysis Foster and Swenson (1997) built on and re-tested the Shields model to find that seven factors are significant in success: top management support, implementation training, performance evaluation compensation links, link to quality, resources adequacy, and the number of primary applications. They also tested the Shields and Young (1989) model of the seven C’s. Four of the seven C's were significant - compensation, controls, champion, and commitment. This was perhaps due to poor operationalising of three of the C’s - culture, change process, continuous education. McGowan and Klammer (1997) confirmed many of the same factors – top management support, the degree to which objectives are understood, the adequacy of training and training resources, and the linkage of ABC to performance evaluation criteria. They identified a potential need for users to be more involved in the implementation process so that they had more commitment to the results.

Anderson and Young (1999) identified from the literature 27 candidate variables for analysis of determinants of evaluations of ABC implementations. These factors were categorised as individual characteristics, organisational factors, technological factors, task characteristics and external environment. They identified possible contextual and process factors that relate to ABC success to produce the model in Figure 2.3. This model adds to the literature in that this is the first attempt to separate contextual from process variables. The key implementation process factors are management support (MSUPPORT), management involvement (MINVOLVE), union support (USUPPORT) and resources put into the ABC project. They are linked to three measures of evaluation of ABC implementation.



*Figure 2.3 Anderson and Young (1999) model of contextual and process variables*

This model was tested at implementations of ABC across plants of General Motors and Chrysler in the U.S.A. Stable relationships which existed for both companies

between contextual and process variables and effectiveness variables included a link between:

1. perceived data accuracy and adequacy of project resources
2. perceived data accuracy and respondents attitude towards change.
3. the use of ABC data and the perceived reward environment
4. the use of ABC and union support of the ABC project.

An important finding is that the line at the bottom of Figure 2.3 from contextual factors to evaluation measures is significant. That is, although considerable effort is put into managing the process of ABC implementation, if the organisational context is not conducive to the application of ABC, then the implementation will be a failure. This is consistent with the conclusions of Malmi (1997).

Brewer (1999) has focused on the issue of national culture and its impact on ABC systems. Using Hofstede's culture framework he showed for the single organisation in his sample that the success of ABC was higher in Malaysia than in the United States of America. The logical argument behind this was that because Malaysia is a high power distance / low individualism nation the combination of a top-down ABC system with the cross-functional approach was more readily accepted in Malaysia.

#### **2.2.4 Satisfaction with and success of ABC systems**

The previous section outlined the factors that contribute to the success or failure of ABC. This section covers literature concerned with the satisfaction with and success of ABC because the concept of "success" is closely connected with the views of "satisfaction with". Both are difficult concepts to define.

In the early stages of new cost management developments Young and Selto (1991) reflected upon this definitional problem. Argyris and Kaplan (1994) defined success from the viewpoint of whether it influences decisions. This particular view has been debated by Malmi (1997), although recent studies (eg. Warwick, Reeve and Feltrin, 1997) continue to use perceived decision usefulness. Shields (1995), studied “success” but reflected on the problem of identifying what is meant by success. In their review of the literature relating to ABC success Foster and Swenson (1997) identified seven studies of ABC success which used four different types of measures of ABC success:

1. use of information in decision-making
2. decision actions as a result of ABC
3. dollar improvements resulting from senior managers
4. management evaluation.

The authors explored a range of success measures and argued that broader measures of success can improve explanatory power. In subsequently published research the only factors used by Anderson and Young (1999) to judge ABC effectiveness are perceived data accuracy and the use of ABC data for cost reduction.

McGowan (1998) possibly used the broadest set of measures of satisfaction with ABC, as she investigated the perceived benefits of ABCM implementation in four U.S. sites. She found that there was an overall favourable attitude to ABC and that the ABC data was perceived as technically better in terms of reliability, accuracy, and timeliness. ABC was also perceived to improve the working lives of employees in aspects such as the quality of work, control over work, ability to accomplish their work and overall effectiveness. McGowan (1998) used six hypotheses in relation to the impact of ABC on the organisation and found support for all six hypotheses relating to quality of decisions, waste reduction, innovation, quality of relationships across functions, communication across functions and the overall focus on the goals of the organisation. The study sought to distinguish the

satisfaction of preparers and users but did not find substantial differences. The study is a further cross-sectional study which does not help us understand the dynamics of change as the ABC implementation matures.

Table 2.2 outlines some of the major research studies that provide insights into the level of satisfaction with or success of ABC. Most of the earlier research is small-scale case studies but more recently these have been replaced by larger scale surveys. Most of these research studies use a single measure of ABC success.

**Table 2.2 Studies of success**

Researchers	Type of Research	Sample size	Conclusion as to usefulness of ABC / ABM
Cooper et al (1992)	Case research	8	Almost all gained some benefit from ABC. In many cases had not impacted on the profitability of the company.
Cobb, Innes and Mitchell (1993)	Case	2	Implemented ABC and then dropped it because of the high costs of data collection.
Friedman and Lyne (1995)	Case	11	Two failures and some initial objectives not achieved in the remaining cases.
Innes and Mitchell (1995)	Survey	49 (for this section)	65% of ABC users considered their overall experience with ABC to be 'fairly successful'. 2 % rated their ABC experience as 'fairly unsuccessful', a further 20% appeared uncertain and did not respond to this question.
Shields (1995)	Survey	143	Moderate level of success, 75% received financial benefit. There is "considerable variation in the degree of success firms have with ABC" p. 149. Identifies behavioural and organisational factors as impediments.
Swenson (1995)	Telephone interviews	25 firms 60 people	Satisfaction had improved for all three groups of interviewees. Non-financial managers still not satisfied with the cost management system.
Roberts and Silvester (1996)	Survey / field	Not stated	"...many implementations of activity-based costing have failed" p.23
Foster and Swenson (1997)	Survey	166 responses	On average there was satisfaction with ABC in all of the four measures. Line managers seemed least satisfied.
McGowan and Klammer (1997)	Interviews	53 at 4 sites	Moderately satisfied with ABCM information
McGowan (1998)	Survey	69 at 4 sites	Found support for the quality of information, its perceived usefulness, and its impact.

The results of these studies reveal a generally favourable attitude to ABC. This is contrary to the Australian experience. Chenhall and Langfield-Smith (1998) found that activity-based techniques ranked lowest of all management accounting practices in terms of usefulness. Sampling for some of these surveys (eg. McGowan, 1998; McGowan and Klammer, 1997; Foster and Swenson, 1997) came from organisations where it was known that they were likely to still be using ABC. Therefore it was less likely that negative attitudes to ABC predominated; they would be more likely in sites where ABC had been used and had been stopped.

### **2.2.5 Behavioural and Social Consequences**

Young and Selto (1991) in their review of the cost management literature recommended broad ranging research.

“In order to have a significant impact on either the academic or practitioner community, cost management research will have to assess the economic, behavioural and social consequences of new manufacturing practices and new cost management methods”. (Young and Selto, 1991, p.288).

While there is some work on the economic consequences of ABC, there is less evidence of research relating specifically to behavioural and social consequences.

Studies of the managerial consequences of the impact of ABC typically consider how ABC impacts on specific management decisions (McGowan, 1998). In contrast, Malmi (1997) suggests that concentration on short-term impacts on decision-making is unhelpful. Rather than changing decisions, the role of ABC information may be to reduce the uncertainty of the chosen strategic direction. ABC would therefore form part of the control systems role in signalling, surveillance, and decision ratification. While ABC proponents might suggest that ABC should bring about better decisions, Merchant and Shields (1993) provocatively suggested that inaccurate traditional costs may help managers bring about decisions more congruent with the direction of the organisation.

Bhimani and Pigott (1992), Norris (1994) and Norris (1997) found evidence that ABC improved communication by providing a common accounting language and a common understanding of costs. In addition, Bhimani and Pigott (1992), Norris (1994) and Norris (1997) found that the implementation of ABC enhanced the role of the accounting function. Accountants morale increased, as they felt they were “playing a more legitimate role within the firm” (Bhimani and Pigott, 1992, p.127). Norris (1997) showed that those managers who came across the accounting involvement in ABC implementations, and were affected by the ABC exercise, had a more positive attitude to the accountants and now saw them as supporting manufacturing.

Malmi (1997) did uncover some behavioural and social impacts of an ABC system which encountered resistance. He discusses the role of organisational politics and culture in relation to ABC. The ABC made the economics of the axle division more visible and the sub-unit more accountable. It also challenged the prevailing engineering culture, which saw accounting as not of primary importance.

This idea that ABC could produce cultural change has been raised in the ABC literature (eg. Clark and Baxter, 1992) but not well explored. Soin (1996, p.295) traces the role of ABC in creating second order change in a U.K. clearing bank:

*“A key feature of the introduction of ABC in the Clearing department was that it made costs visible to the clearing department organisational members and created a new cost discourse that was based on the concepts of cost and rationalisation. By making costs visible, it empowered individuals and made them more responsible, and was therefore a means of promoting discipline...”*

Soin (1992) also explores the process of resistance to this change. Resistance to ABC as a coercive mechanism of control is the focus of the study of Ezzamel, Willmott, and Worthington (1998):

*“Alternative management accounting techniques such as ABC ... were simply seen by workers as a means of subordinating them and rendering their performance easier to manipulate by management”*  
(Ezzamel et al, p.36).

As well as seeing ABC as not relevant to the situation of the “Plant with a Problem”, Ezzamel et al believe it was resisted by workers who do not wish to submit to another instrument of management intrusiveness into the workplace.

## **2.3 The Critique of ABC**

ABC has a number of detractors; both practitioners and academics. Some of these criticisms relate to technical issues including the validity of the cost relationships developed (Noreen, 1991; Roth and Borthick, 1991). Others argue that cost information provides an invalid focus for decision-making. Foremost amongst these critics, Goldratt (1990,p.40) believes that the focus should be on throughput not local optimisation. He argues that the focus on cost leads to a decline in performance in the long run. He claims that:

*“...the financial community is totally immersed in an attempt to save the obsolete solution. 'Cost drivers' and 'activity based costing' are the names of these fruitless efforts.”*

A number of papers are now emerging which show the possible integration of the throughput philosophy championed by Goldratt and ABC approaches (eg Salafatinos, 1994). To reduce the force of the argument of those who see ABC as purely a costing exercise, ABC writers often attempt to integrate achievement of improved performance in relation to cost with those of quality and timeliness (eg Turney, 1991).

Other detractors of ABC, while accepting the validity of cost information for decision-making, argue that it is inappropriate to use full cost. This is the long-standing debate in the decision-making literature over the use of full-cost compared

with the use of micro-economic principles and concepts such as incremental or differential cost. Another concern in the use of activity based cost information for decision-making is the lack of attention to strategic issues (Shank and Govindarajan, 1993).

Some attention has focused on the overuse of ABC particularly for cost management (Johnson (1991, 1992)); although this critique more reasonably applies to the use of the drivers for managing costs than the management of activities. Johnson having once advocated the use of ABC information for cost control (Johnson and Loewe, 1987) has now turned against ABC although he still advocates its use as a costing system for strategic decisions.

Most of these concerns centre on technical weaknesses of ABC and its possible misuse for decision-making and cost control.

## **2.4 Gaps in the ABC / ABM literature**

The analysis above shows that there is now a developing ABC research literature. However when this study was commenced in 1993 there was a relatively limited research literature. There were five particular gaps in the literature at the commencement of the research which provided the motivation for the study and guided the research methodology chosen.

The major weakness in the published research was the lack of studies of the impact of ABC over time which could then track changes in both the organisation and the ABC system over time. Shields (1995, p.164) notes: "An interesting approach for empirical research would be to use a research design that captures the longitudinal aspects of the design, implementation and use of cost management systems." Short-run gains from cost emphases are not unlikely but long-term advantages are not assured. Anecdotal and documented evidence points to a number of sites that have been less than successful in the long-term with ABC. Bhimani and Pigott (1992) studied an implementation for eight months until "the new accounting system was

fully operational and running in parallel with the conventional costing system.” (Bhimani and Pigott, 1992, p.121). This time period was inadequate for review of the consequences of accounting change. Anderson (1995) has claimed to produce “the first clinical account of ABC implementation that spans many years and includes the perspectives of management from many functional areas and hierarchical levels” (p.2). The research write-up stopped before the case study firm, General Motors, reached the final stage of using ABC as a routine part of organisational life. Since my study commenced there have been some longitudinal studies of ABC. Soin (1996) studied ABC in a bank over 30 months which provided opportunity to look at the resistance to change issues. Malmi (1997) and Ezzamel et al (1998) have written up examples of ABC failure in a particular organisation over several years, both from very different perspectives. Richer insights into the long-term impact of ABC are only possible from longitudinal studies. There are still very few of these.

Longitudinal studies are more able to focus on long-term impacts on decision-making and broader behavioural impacts. For example it is not clear how ABC information has affected decision-making in the long-term. Even if it can be demonstrated that ABC information is technically superior it is not useful if it is not used. Anderson’s evidence at GM indicated that “We can’t point to widespread use yet and we need to understand why” (Anderson, 1995, p.43). Some studies (Innes and Mitchell, 1990) have focused on the use of ABC information for decision-making; but these tend to be opinions formed over a short period in the early implementation of ABC.

Secondly, there was a lack of rich studies drawing on context which explore the broader behavioural impacts of ABC. The existing literature was often favourable to ABC and did not direct attention to the adverse consequences, although Johnson (1992) sounded the warning. As previously observed, research in other areas of accounting has shown that new accounting technologies which appear to be introduced from the perspective of efficiency and resource utilisation may have

impacts on power relationships (Covaleski and Dirsmith, 1986), and have unintended consequences (Hopwood, 1984).

Some case studies (Innes and Mitchell, 1990) pointed to attitudinal changes that have come about through the use of ABC. Again it is more likely that longitudinal studies will enable researchers to reach deeper comprehension of attitudinal and behavioural changes. Innes and Mitchell (1995) conclude with an encouragement to engage in case studies which would “permit a more direct and detailed investigation of the full (positive and negative) effects of ABC” (p.151).

The desire to understand broader behavioural impacts of ABC must also involve looking at various levels of the organisation so not just a managerial perspective is taken, as noted in Chapter 1 in the critique of Puxty (1993). There was little evidence in 1992 of the way ABC systems have impacted on various levels of employees in organisations including senior managers, middle managers and “shop floor” employees. Some organisations have sought to increase workforce involvement through a team-based approach to ABC but there is limited research on the long-term effects on the attitudes and behaviour of employees (Henning and Lindahl, 1994). In sites that have used ABC as a management information system within traditional hierarchical organisations, there is no evidence of how this has impacted on decision-makers throughout the organisation from senior managers to the “shop-floor” operatives. This is inevitably a problem of studies which have focused on senior managers rather than the entire organisation. Anderson’s study admits to being from the “perspectives of management” (Anderson, 1995, p.2) and does not attempt to take on the attitudes of shop-floor operators. Ezzamel et al (1998) have since produced one case study of the shop-floor impacts of ABC.

A third problem was the assumption that the implementation of an accounting or management intervention can be studied in isolation from forces of change in a dynamic organisation. Most of the published research comes from a positivist methodology usually based on cross-sectional measurement of a few variables. A

richer perspective has been gained by scholars who have embarked on a deeper more naturalistic approach to research (eg Sooin, 1996).

Fourthly, the concept of ABC is flexible and both academics and practitioners use a variety of terminology for the same thing. There is evidence of organisations changing their own concept of ABC in practice by changing the objectives, development, and use of ABC during an implementation (Thorne and Gurd, 1999). This is contrary to the historically unstated assumption in both academic and professional treatises on this subject that ABC as a system is rigid and unyielding to organisational pressures. Gosselin (1997) does look at stages of development of ABC but given that it is cross-sectional research it does not explain how organisations could move from one level of activity analysis to the other and sometimes back again. He also assumes that product costing is the eventual goal when in practice organisations have been observed to move from product costing back to management uses of ABC data.

Lastly, the focus of research and professional papers has historically been, and still appears to be, on manufacturing industries. The literature review above demonstrates that since 1992 there are many more papers that address the use of ABC in the service industry sector. However the research literature still appears to be significantly weighted towards understanding cost management techniques in the manufacturing sector. A relatively recent edition of the *Accounting Research Journal* (Vol.10, no.7, 1997) devoted to cost management contained five ABC research papers. Three of these were research exclusively involving manufacturing, one predominantly manufacturing and only one research study involved solely service organisations. The service sector, including government and not-for-profit organisations, is both significantly larger and growing faster than manufacturing in most western economies. The failure to provide insights in the service sector is a continuing gap in the ABC literature.

## 2.5 Conclusions

In this chapter I have reviewed the activity based costing literature. At the commencement of the research there were five clear deficiencies in the activity-based literature. Each of these deficiencies is addressed in this research.

The first issue was the lack of ABC research that investigated ABC systems over time. A longitudinal study was chosen. Contrary to the previous research that had been primarily cross-sectional or a short-run view of a particular case, I decided to take at least a medium term time frame. Although there have been other longitudinal studies of ABC published since 1993 there has been considerable variety of outcomes reflecting the richness of the organisational contexts they have emerged from. More longitudinal studies, such as this one, will add to this body of knowledge.

Secondly, I endeavoured to explore the broadest range of behavioural impacts. I decided to seek out the understandings of a range of organisational participants to obtain a more encompassing view of ABC in organisations. Although I came from a position of having consulted in ABC and therefore was sympathetic to the ABC approach, I was more than willing to adopt a critical view and identify the unfavourable impacts on the whole organisation.

Thirdly I adopted an interpretivist ontological stance. Most research in the area was from a more positivist position of testing hypotheses of a few key variables. This is still true of much recent ABC literature. An interpretivist approach to a case study was likely to yield richer insights. ABC is so intertwined with so many other contextual variables that an in-depth case study was an appealing approach in addressing this problem in the literature.

The fourth limitation of the literature, the unwillingness of researchers to see ABC as a flexible technique which could be moulded by organisational change was addressed by working on a longitudinal case study.

Fifthly, a service industry organisation was chosen as there was likely to be a range of issues in a service industry that are not applicable in manufacturing organisations. In particular the role of professionals and professional groups could be investigated as well as issues between managers and workers. As noted above, research in ABC continues to be dominated by manufacturing organisations although it continues to be a smaller proportion of the economy. The added advantage was that the organisation chosen was in the public sector during the period of the research and so the research can link in with the evolving “alternative” research approach in the public sector.

These five limitations in the literature provided a motivation to engage in a longitudinal study of ABC in its organisational context in a service organisation.

This research then turns the attention back to the broader role of accounting within an organisation. In particular, it aims to broaden the understanding of the use of ABC in a service industry, particularly one with community service obligations. The study was conducted longitudinally to explore the interaction of the implementation of ABC with the organisational context. The specific expectation was that ABC would both shape and be shaped by the organisation (Nahapiet, 1988).

The next chapter examines the literature relating to accounting and organisational change.

### **3 Accounting and organisational change – prior research**

This chapter analyses some of the frameworks used in the accounting literature to explore how accounting is implicated in organisational change either as antecedent or consequence. It does not attempt to capture the diversity of frameworks and perspectives of the broader organisational change literature. For each of these frameworks I have explained some of the insights that emerge in relation to accounting and organisational change.

#### **3.1 Introduction**

Accounting can change as a reflector of organisational change and accounting and accountants bring about change (Hopwood, 1987). In analysing Case M, Hopwood saw accounting as providing the basis for creating change and then being changed itself by the new organisational circumstances. Innes and Mitchell (1990) list organisational change as one of the catalysts for accounting change, and then comment on the impact of accounting change on the on the organisation. Concerned with changes in the way organisations are managed in Western countries, Ezzamel, Lilley and Willmott (1997) interviewed British workers and managers about organisational change and concluded that “accounting measures are being harnessed to implement the ‘new’ ways of management” (p.461). For example, empowerment, they suggested implies accountability, and hence the use of accounting – both financial and non-financial metrics. Not only is accounting transforming but accounting itself has been transformed. By labelling the previous approaches as a discredited ‘old’ accounting, there has been the development of new accountings which can colonise the organisation.

Hopwood (1990) saw accounting implicated in organisational change in three ways:

1. “... *creating ... visibility*” (p.8). Once the non-visible are recorded in accounting terms it can “influence perceptions, change language and infuse dialogue” (p.8) hence changing what is important, creating anxieties and revealing new directions and actions. Hopwood suggested a range of questions that this issue of visibility may affect, including what is made visible, and what is not, and which groups have the power to make things visible. Ezzamel et al (1997) recognised this ability of accounting to make visible and manageable. However, they also believed that this made accounting vulnerable, as its arbitrariness and the artificiality of the boundaries it creates are also visible.
2. “... *a calculative practice ... in the objectification of phenomena*” (p.9). Accountants take the abstract and turn it into something concrete. Connections between means and ends can now be achieved, and the relationship between accounting and other parts of organisational life can be expressed “objectively”.
3. “... *creating a domain of economic action*” (p.10). The social and political can be influenced by the economic, once accounting has operationalised the economic. Hopwood (1990) suggested that the economic is becoming more powerful, particularly in the public sector, and the accounting craft is involved in this process.

Although accounting is not inevitably connected with organisational change it is likely that it will be involved because of these three roles above. Hopwood (1990, p.10) illustrated the role of accounting during organisational change by looking at the way it can be used for “reweaving the inside in the name of the outside”. Accounting can bring a stronger market orientation and profit perspective into all areas of an organisation. Organisations are broken down into smaller sections to allow the mentality of the market to permeate throughout creating new accountabilities.

Within the accounting literature there are some dominant theoretical perspectives used in the analysis of accounting and organisational change. This chapter briefly reflects on five of these and the insights that they give in relation to the role of accounting during organisational change:

1. Laughlin's framework of rebuttal, reorientation, colonisation and evolution.
2. Boundary maintenance
3. Structuration theory
4. Descriptions (atheoretical) of organisational change
5. More critical perspectives, for example, labour process theory.

## **3.2 The Laughlin Framework of Organisational Change**

### **3.2.1 Description of the framework**

Laughlin's approach is to use skeletal theory or middle range thinking to inform his research (Laughlin, 1995). Skeletal theory both informs his explanations and is developed by the research experience. The "theoretical skeleton" (Laughlin, Broadbent and Willig-Atherton, 1994, p.100) which he has used to explore accounting in organisational change relates to response to environmental disturbance. The roots of his approach go back to Habermas but build on the work of Greenwood and Hinings (1988). This model has been used many times in the accounting literature but for completeness it is sketched below.

Laughlin's model (1991) looked at the impact of a jolt or disturbance on an organisation and how the organisation might respond. "Organizational change comes from and is generated by "environmental impetus" (Bartunek, 1984), "kicks" (Morgan, 1986), "environmental noise" (Smith, 1982) or "disturbances" (Laughlin, 1991) ..." (Broadbent and Laughlin, 1998, p.406). The "tracks" of the disturbance bring about relatively superficial or first order change, or more fundamental second-order change which go to the fundamental beliefs of the organisation.

In Laughlin's framework there are three main elements of the organisation (as seen in Figure 3.1) - the interpretive schemes, the design archetypes and the sub-systems. This is an extension of Hinings and Greenwood (1988) who have the interpretive scheme as part of the design archetype. By separating out the two Laughlin enables the researcher to more clearly understand the nature of the change process. The interpretive schemes can be broken into different levels of abstraction. Laughlin (1991) has three levels:

1. Level 1 the beliefs, values and norms
2. Level 2 the mission/ purpose
3. Level 3 the meta-rules

The concept of a design archetype relates to:

*“... prevailing conceptions of what an organisation should be doing, of how it should be doing it and how it should be judged, combined with structures and processes that serve to implement and reinforce those ideas”.* (Greenwood and Hinings, 1988, p.4).

Drawing from Habermas, Broadbent and Laughlin (1997) saw the design archetype as the organisational steering media, directing the tangible sub-systems of the organisation to reflect the interpretive schemes. Importantly, accounting is perceived as a central part of the design archetypes in most organisations. The sub-systems are the tangible elements – the buildings, machines and people; and the behaviours and natures of these elements.

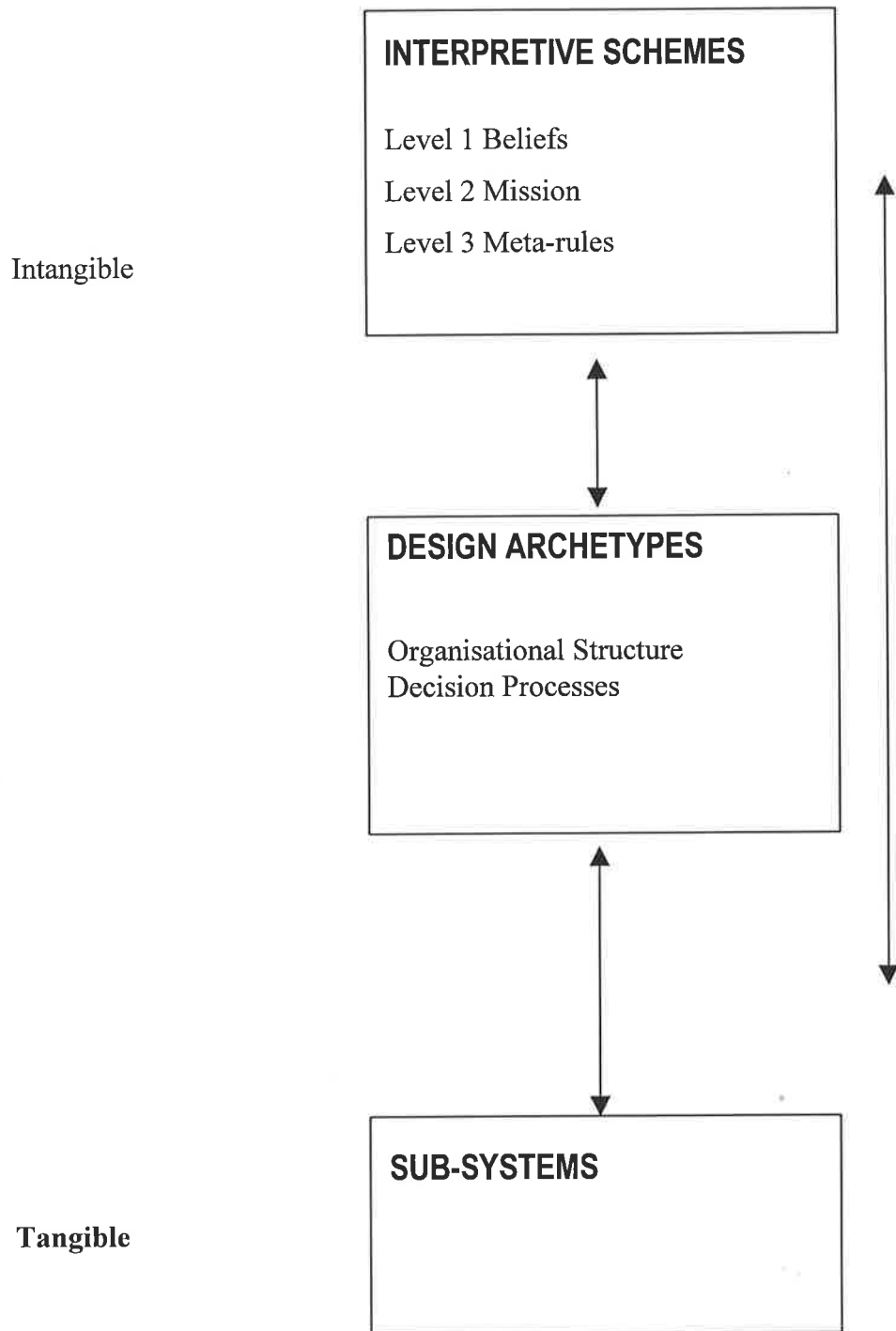
Although there is conflict in organisations, the model of organisations used here stresses their coherence. The interpretive schemes, design archetypes and sub-systems are in some "dynamic balance"; that is, there is some acceptance of the dominant perspective of the organisation which gives it coherence despite voices of dissent.

Having identified the major elements of the organisation, the real point of the framework is to see how the organisation responds to jolts, and trace the tracks of these changes. The idea of tracks has been picked up from Greenwood and Hinings (1988). Four “tracks” are identified by Laughlin (1991):

1. Rebuttal – fairly rapid and possibly temporary changes in the design archetype. A single interpretive scheme can accommodate more than one design archetype and so the design archetype can develop or return to what it was before the rebuttal.
2. Re-orientation – there has to be some change, but it is only first-order. The interpretive scheme remains constant but a new design archetype and new sub-systems are developed. The central core of the organisation is unchanged. This form of change is illustrated in Figure 3.2.
3. Colonisation – this is a change forced on the organisation, where there is a transformation first of all of the design archetypes and then a shift in the interpretive schemes (and the sub-systems) with perhaps no reference to the previous interpretive schemes. As Laughlin (1991, p.220) puts it:

*“Change in a colonisation sense is meant to reflect this, whereby a small group, on the back of an environmental disturbance, create lasting and fundamental change in both the visible and invisible elements in any organisation. In this situation, the remaining participants either leave or chose to live, however reluctantly, under a new underlying dominant ethos”.*

This form of second-order change is illustrated in Figure 3.2.

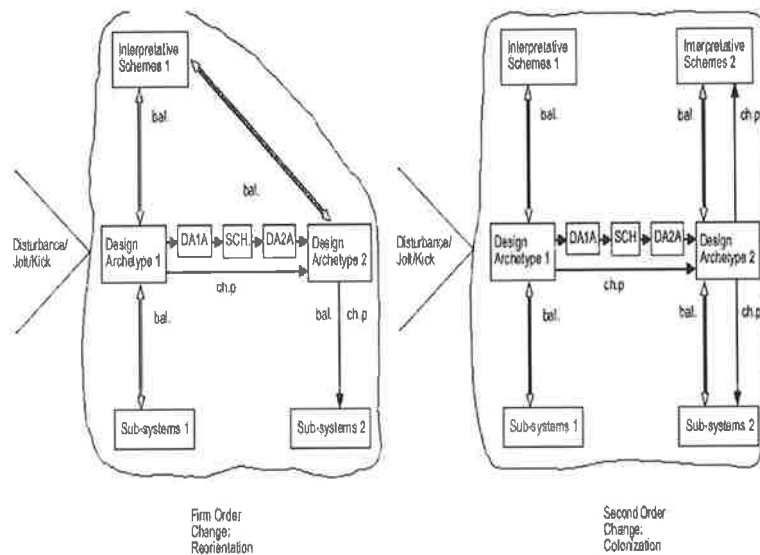


*Figure 3.1 Laughlin's model of organisations (Laughlin, 1991)*

4. Evolution – Like colonisation it is a second-order change but it “is chosen and accepted by all the organisational participants freely and without coercion” (Laughlin, 1991, p.220). A change in the interpretive scheme is brought about by rational discussion and then the design archetypes and sub-systems evolve in line with the new scheme.

Care must be taken in defining tracks, as rigid delineations of tracks might be limiting. Work by Kikulis, Slack and Hinings (1995) identifies six tracks which an organisation can follow. These tracks relate to change at two different levels - morphostatic and morphogenetic. The first two of these tracks are morphostatic or first-order change where things are made to look different but the fundamental core is unaltered. Second-order change or morphogenesis takes place when the methods and fundamentals of an organisation are changed. Kikulus, Slack and Hinings (1995) wrote of evolutionary and revolutionary change.

Two common tracks are presented in figure 3.2. The re-orientation track may produce changing design archetypes and with that the sub-systems, but the interpretive scheme is unaffected. Such a level of change is principally cosmetic, giving the appearance of change while keeping the organisational culture in tact. Colonisation results in a change in the interpretive scheme, usually by coercion which brings about change in the design archetype and sub-systems.



**Figure 3.2 Two Common Tracks - Reorientation and Colonisation (reproduced exactly from Broadbent and Laughlin, 1997)**

Despite its immediate appeal the Laughlin model has been both criticised and further refined. Some of the limitations which subsequent researchers have encountered are:

- The difficulty of defining the interpretive schemes, design archetypes and sub-systems in practice. "... recognition must be given to the amorphous nature of the categories ... They may be seen as strata of different coloured sands, slipping and sliding together, undulating and mixing in places, yet retaining their integrity in others" (Broadbent, 1992, p.346). Soijn (1996) recognised this problem in using the Laughlin framework in her own research.
- There is a possibility of fragmentation with different members of the organisation holding different interpretive schemes (Broadbent, 1992). Broadbent suggested that this can happen because of different levels within the interpretive schemes. Agreement at the higher levels of interpretive schemes can allow for differences at the lower levels (eg the cultural level).

- The point at which first-level change becomes second-order change can be unclear if organisational members have different interpretive schemes at least at the cultural level (Broadbent, 1992). This introduces the possibility of a schizoid organisation. Change may take place before the design archetype changes. This may come about through the different interpretations of the design archetype. For example an accounting system may not change but the use of the information may change:
- “... the accounting records, forming part of the design archetype did not change; they retained the orientation suggested by the previous ‘civic culture’. It was the attitudes of the different members of the organisation and their differing interpretations of the information which are an indication of change ... The same design archetype is flexible enough to link to different cultures and this allows ‘schizoid’ organisations to continue without a need for change of the more tangible elements. Given that tangible elements such as an accounting system cannot be changed instantaneously ... the existence of this flexibility is important. It allows for change of the design archetype to be phased in on a more evolutionary basis and lag behind a change in the interpretive schemes” (Broadbent, 1992, p.364).

The tracks are therefore much more complicated than the four delineated by Laughlin (1991). Soin (1996) suggested that the framework does not take on directly the issue of power relationships which was so crucial in her analysis in understanding organisational change.

Despite these issues, researchers such as Broadbent (1992) and Soin (1996) have found it the Laughlin model to be a useful mechanism for understanding organisational change and particularly the role of accounting. The next section explains the use of this framework in research into accounting and organisational change.

### 3.2.2 Previous Use of the Laughlin Framework

Laughlin's framework has been used by scholars examining the role of accounting in organisational change in the public sector, and is hence useful for exploring organisational change in ETSA. In his original paper, Laughlin (1991) reflected on previous research into the Church of England and Euro Railways. He reinterpreted the Dent (1991) study of Euro-Railways as a colonisation, where the interpretive scheme shifted from a railway culture to a profit making culture. The colonising group was the new class of Business Managers who brought in the language of accounting as a primary vehicle for change. In contrast he saw the Church of England as reaching only first-order change not second-order change - a re-orientation. The Report on Church Finances tried to solve the financial problems without changing the fundamental interpretive scheme of the Church as a sacred organisation. Laughlin (1991) suggested there was room for research work to uncover over time the dynamics of change in organisations.

Broadbent's (1992) research in the National Health Service extended and developed the Laughlin framework. She investigated the role of budgeting in the catering service in the northern area of the United Kingdom. The new managerialism, with its focus on a business oriented culture, impacted on some of the managers, but they still "oscillate" between interpretive schemes. The catering manager had rebutted the change and maintained his interpretive scheme. He had an unchanged view about the way a catering service should operate in terms of cost, quality, and service – the biscuits with the tea are not disappearing because his mindset has not changed. There is some uniqueness about this situation inasmuch as that in the longer term the catering service was going to be pulled into the net of health care reforms with competitive tendering.

Laughlin, Broadbent, Shearn, and Willig-Atherton (1994) discuss the coping mechanism of the small group in relation to the local management of schools. They

explored the role of a small group of staff in absorbing the changes thrust upon schools. In particular they classify a range of behaviours in head teachers. Laughlin, Broadbent and Willig-Atherton (1994) use the Laughlin model to analyse changes to GP practices in the U.K. as more pressure was applied to achieve “value for money”. GPs, because of their dominating power relationship over nurses and practice managers, resisted changes and there were only first order changes to the design archetype and the interpretive schemes. The GPs therefore acted as an absorbing group; although the authors see the potential for the practice managers and nurses to attempt a coup and colonise the changes. Nurses and practice managers found some satisfaction in the new roles they were able to play. But here is a case where the power relationships in the organisation have a significant impact on the way change is reflected in the organisation.

Broadbent and Laughlin (1997) contrast the way GP practices and schools were able to absorb changes by government. Financial contracts and accountability requirements brought the professionals who provided these services under the surveillance of government. They employed staff to absorb the changes so that core activities could continue basically unchanged, although in the case of schools they had to give up teaching staff in order to employ bursars and administrators. The GP practices had more resources to create an absorbing group. They were also better off as the colonising forces were not as strong as the inspections and league tables used in the schools. There are clearly limits to the capacity of any absorbing group, and those in schools found it increasingly difficult to resist the changes. At the same time there were headteachers and senior GPs who saw the reforms as an opportunity and not a threat and therefore colonised the reforms. Broadbent and Laughlin (1997) see the intrusions in education as more threatening to the ethos of the educational system than the changes in medical practices.

Jacobs (1995) study of the Canterbury Health Board used the Laughlin framework to explain the role of clinical directors to transmit budgets and budgetary control. Accounting, budgets and performance measurement were the steering media by

which the external changes of public sector reforms permeated the internal structures of health care providers. Accounting was a tool to make actions of staff more visible and hence make the staff more accountable. The new budgetary system was seen as a tangible response to government requirements for more accountability, it was a tool to control doctors and it was used for performance-based pay. The people in the organisation who were given the task of being the champions of bringing in the new budgeting and control system were the clinical directors. However rather than colonising the changes most clinical directors saw their role as absorbing the changes, they were the absorbing group. They did feel under pressure. Some continued as if they could eventually revert to the previous situation. Only one clinical director acted as a coloniser but as a result he was marginalised and seen as part of the management group. The role of accounting is seen here as negative, it is a means that management may use to transform the values and behaviour of the organisation. Resistance is not to be unexpected.

Soin's (1996) research was based in the profit-sector in UK clearing banks. This is an environment which is different to those used in much of the research that has used the Laughlin framework. Initially she found balance between the interpretive schemes, design arche-types and sub-systems. The particular jolt was the changes to the overall banking environment including deregulation, increased competition, and capital adequacy. There was a second jolt – the strategic response within Trafalgar. She tracks the changes in the meta-rules to explicit recognition of profitability, with changes to the mission and then the design archetype. However Soin identifies a schizoid organisation in relation to culture. The accounting system was an important part of the design archetype and the change in the accounting system made cost more visible. It appears that colonisation occurred with the ABC system enabling this:

*“The changes in the meta-rules and mission had been unequivocally accepted, but the ABC system enabled them to be operationalised in the clearing department” (Soin, 1996, p.274).*

The change was produced through top-down imposition and Soin acknowledges the important part of power in bringing about change – an aspect that is not explicitly covered in Laughlin’s framework. The change in the design archetype was forced upon the members of the clearing department, but the staff then inadvertently used the ABC information because it was useful. She therefore argues that the concept of imperialism may fit her case rather than colonisation, as change was forced by “an elite of senior manager who wielded the power” (Soin, 1996, p.285).

Another piece of research in the profit sector is the work of Richardson, Cullen and Richardson (1996) relating to a firm known only by its pseudonym – Machine Inspection Services Ltd.. Here accounting is seen in a positive role of trying to change the interpretive scheme of the owner. The owner/ manager does not respond and resists changes in his interpretive scheme, and the other employees who cannot share his interpretive scheme leave the company. They have some regrets, that they did not exert sufficient pressure at crucial times to bring about a permanent change. This study is relatively unique in the body of research that uses the Laughlin framework because it sees accounting as enabling – it is accounting that might save the organisation from destruction.

### **3.2.3 Conclusions from the Laughlin framework**

There is a range of research into the role of accounting and organisational change. Nearly all of the previous research sees accounting as potentially problematic. It is accounting that features as part of the jolt or disturbance in the work of Laughlin, Broadbent and Willig-Atherton (1994). The authors, using a Marxist analysis, suggest that finance is “anxiety-inducing” (p.64). Accounting may be enabling but it has the potential to overwhelm. The overall conclusion of most of the research using the Laughlin framework is to see accounting as intrusive. This is perhaps more a product of the environments in which most of this research has been conducted – primarily public sector organisations being dragged into a world of increased accountability and visibility.

Some of the major issues identified are:

- First-order change is a likely outcome of a change programme. Organisational participants will protect the core of the organisation by making changes at the periphery.
- Critical to the protection of the core will be the role of absorbing groups. There are likely to be some who see the changes as reform and push to colonise the changes.
- Colonisation can happen with pressure from the top of the organisation. The very nature of the reforms may make it difficult for absorbing groups to resist.
- Accounting systems form, as one element of the design archetype, the potential to be an enabler of change. Managers may pick up accounting systems as one tool to change the way the organisation functions and bring about a cost or profit culture from a professional culture.
- Imposition of a new design archetype in the form of accounting systems may be done involuntarily and almost inadvertently as staff may subsequently use this information.

### **3.3 Boundary Maintenance**

#### **3.3.1 Description of the Theory**

Boundary maintenance has been recognised as a role of accounting (Hopwood, 1987), in creating and maintaining the boundaries of an organisation in a social setting. As developed by Llewellyn (1994) it is not specifically a theory of organisational change; however, she believes that “boundary maintenance is tied up in processes of change in organizations” (Llewellyn, 1994, p.16). She asserts that organisational change comes through the change of organisational boundaries; their “...dissolution and reconstitution” (Llewellyn, 1998, p.23). In particular, boundary-

work may be a useful way of theorising in situations of organisational change because it “captures how organizational change is negotiated through people” (Llewellyn, 1998, p.42).

Accounting is one of the resources used by agents to “create a difference” (Llewellyn, 1994, p.19) between an organisation and society. So accounting is one of the information resources used in boundary maintenance. There are two activities in creating the difference. The first is maintaining thresholds between the organisation and society. This is principally the role of financial accounting. The other is managing the boundaries through binding structures, which is the role of management accounting. Management accounting as a binding structure holds the organisation together by creating time and space zones “by reducing, absorbing or denying the uncertainty which is endemic to organisational life” (Llewellyn, 1994, p.14). The role of the gatekeepers in maintaining the boundaries is important. She cites Dent’s (1991) railway study to show that the change of gatekeepers on the external boundaries from railway people to profit-conscious Business Managers changed the way the boundaries were managed and provided greater focus in the organisation on accounting information. Potentially the idea of boundary maintenance provides a useful concept in understanding how an organisation responds to external pressures, and how it manages these internally by the types of binding structures it uses.

### **3.2.2 Previous uses of Boundary Maintenance**

The concept of boundary maintenance can be used to interpret how accounting is implicated in organisational change. Llewellyn (1994) re-interprets the Berry et al (1985) study of the National Coal Board, where there had been a policy of separating production and finance, so that the production culture could continue to work. Pressure at the boundary for better financial outcomes provided a situation in which the loose coupling in the control systems in the organisation and the focus on production could not continue. There was a shift in the boundary definitions and new binding mechanisms were needed.

Llewellyn has used this theory to explain change in the U.K. Social Service on the basis of two types of expertise - caring and costing. During the first stage of this research, social workers effectively separated caring and costing, not allowing costing to impact on caring. Caring managers were a potential threat, for they would want to manage caring within costing parameters. There were actions taken to defend caring from costing. Two years later in stage two of the research there had been a merging of caring with costing. No longer were front-line staff immune to budgetary factors, but were being “educated”. Bringing in new people with a managerial, and more costing, perspective brought about boundary reconstitution. In particular the transfer of budget responsibility to social work management brought about a potential conflict between front-line carers and management, and the dissolving of the boundary between costing and caring.

Overall, the domain of social work had a problem, inasmuch as lack of clear definition of their domain allowed the intrusion of accounting. Costs began to direct the practice of social work. Some front-line managers welcomed the more entrepreneurial approach leading Llewellyn to the belief that there may be capacity to accommodate client advocacy and resource management without significant conflicts. This suggests that accounting may have a complimentary, not necessarily an intrusive, role. At the conclusion of her research Llewellyn suggests that the social services had changed the binding structures from caring towards costing in order to maintain the threshold in relation to funding agencies and preserve their position.

Most research into accounting and organisational change sees the role of accounting as problematic, Jacobs (1998) reported a positive view. The doctors at Pegasus, a group of New Zealand GPs were not concerned about the new accountings. GPs saw their participation in Pegasus as a way of avoiding change, and were prepared to accept some of the accounting changes that came with that. Even the introduction of monthly reporting did not faze them as it was not being introduced by the state. They saw the monthly reports as helping them – not reducing their autonomy. The

issue here was not what system was introduced but by whom. Other GPs were peers and to be viewed as working in the best interests of caring for patients. From a boundary maintenance perspective Pegasus and its external accountability position provided a clearly defined group separate from the authorities and potentially shielding from the authorities. Cost information and monthly reporting contributed to the binding structures, and was seen as a normal part of belonging to such a group. Members benefited from the savings that arose as a result of better cost systems. This is a unique case because of the power relationships of the professionals involved. At the stage of writing the impact of the changes had been relatively minor and had not affected clinical practice. Other environments may not show such relative ease in maintaining the boundary.

### **3.3.3 Conclusions from Boundary Maintenance**

Accounting is one of the resources which defines an organisation's boundary and binds the organisation together. Maintenance of the boundary may enable an organisation to repel new forms of accountability and hence resist organisational change. Members of an organisation may in some cases not find such changes upsetting their preferred modes of operations and accept the new boundary. However in time an organisation may be redefined in terms of its boundary against its preferred direction, for example, to bring in a profit-conscious approach to management. Internal to the organisation, accounting, and particularly management accounting, may be a binding structure. New forms of accounting may be used as binding structures within to forestall any further change from without.

## **3.4 Structuration**

### **3.4.1 An outline of the theoretical position**

Giddens' structuration theory is not a theory of organisational change - but it does provide a framework for thinking about how social structures are maintained,

reproduced, and changed. He (1979, p.69) defines structuration as “conditions governing the continuity or transformation of structures and therefore the reproduction of systems”. Giddens’s theory suggests that organisations may be relatively stable entities, reproducing themselves in space and time. However, structuration is able to give an explanation of change which other theories, especially those that emphasise structure, are unable to do. Stability is important for individuals and this security comes from the stability of structures and routines. Giddens (1984, p.50) suggests that “ordinary day to day life ... involves an ontological security expressing an autonomy of bodily control within predictable routines”. When those routines are broken by ‘critical situations’ the certainties of institutionalised routines are broken. It is through these crises that human agents bring about change, although change can occur through the active role of agents.

The issue of agency and structure has been grappled with in many disciplines. In accounting, agency theory has been an important model, but “These theories depict agents as almost completely unfettered by social structures” (Macintosh and Scapens, p.39). Other views, including some Marxist analysis, seem to shut out agency, ignoring the impact of the agent; agency is overwhelmed by structure.

The concepts of structuration theory have been well expounded in the accounting literature, drawn together in two chapters of Macintosh (1994) as a summary of the previously published work in the accounting literature (Macintosh and Scapens, 1990; Macintosh and Scapens, 1991).

In summary the two key concepts are:

- The duality of structure “by duality of structure I mean that social structures are both produced by human agency, and yet at the same time are the very medium of this constitution” (Giddens, 1976, p.) Through the concept of duality of structure Giddens tries to bridge the agent-structure gap. Structures provide stability of the social order, reproducing and

maintaining themselves. Agents, from Giddens's perspective are knowledgeable, reflexive, and purposive. They have reasons for their behaviour and by their behaviour can alter the structures in which they live. Structures are the outcome of human interaction as well as the medium – this is the duality of structure.

- Social structures - Giddens suggests three forms of social structure – signification (meaning), legitimation (morality) and domination (power). Signification or the theory of coding relates to the interpretive schemes that agents draw upon to interpret their social world. Legitimation relates to the moral consensus of the social order and the norms of actions that are acceptable. Domination is the third element, by which power is exercised.

These concepts become clearer by their application to case situations, as expanded in the next section.

### **3.4.2 Examples of research in structuration and accounting change**

There are at least four particular examples of structuration and management control systems in the literature, three of which have clear connotations of organisational change:

- General Motors
- University of Wisconsin
- Church of England

Each of these organisations was going through a period of organisational change and accounting was implicated in the change of structures. General Motors in 1920 faced a crisis, near bankrupt, with plunging sales and stocks of unsold cars and work in process. Sloan was appointed as the new president and came in to bring in a new strategy, re-organise the structure and bring in new financial control systems. The University of Wisconsin faced a crisis in 1982 and the University officials took action to change the budget discourse.

As previously discussed Laughlin used the Church of England as an example in his first exploratory paper of his organisational change framework. He also uses

structuration theory to explore the Church of England case study (Laughlin, 1990). The Church of England went through periods of change but not perhaps what Giddens might see as crisis. Laughlin (1990, 1991) writes of periods of change which brought about the Report on Church Finances. Laughlin writes of the “financial dynamics”, as the central and diocesan units became more dependent on funding from the parishes with a consequent change in the accountability relationships.

### **Signification**

At General Motors (Macintosh, 1994), the arrival of Sloan brought about a change in the signification structure from an engineering-technical discourse to an accounting-finance meaning. Discussion then proceeded in terms of accounting and finance – standard volumes, return on investment and standard cost variances. In the University of Wisconsin study, the budgeting discussion relied on a signification structure that related to the rationality and neutrality of the budget. The use of an enrolment funding formula (EFF) made it appear that a perfectly rational model of financial management existed. However this rationality did not permeate the University. The change by the University to Decision Narrative Items was an attempt to change the signification structure and force the state into a highly political decision. Not only did the state defeat this attempt but turned it to their own advantage. Laughlin’s analysis revolves around the sacred or the secular as a signification system. It is the sacred that is seen as the signification structure although there are functional areas such as the Church Commissioners that take on a purely secular signification, which allows other areas to protect the sacred. Laughlin connects this with other studies of organisational change where the organisation wishes to preserve its ‘sacrisity’.

### **Legitimation**

Accounting can be used to establish a moral consensus. In the General Motor’s case the “moral underpinnings” became profit seeking and capital growth rather than technical excellence of making automobiles. At the University of Wisconsin it was

the budget which provided “a norm in terms of which legitimacy of particular actions could be assessed...” (Macintosh and Scapens, 1990, p.465). The management accounting system came to be the means of legitimising the political process of resource allocation. In the Church of England, Laughlin (1990) saw the legitimisation in terms of the predominance of the sacred. Only in the case of the Church Commissioners was a just allocation of financial resources the principal form of legitimisation.

### **Domination**

At General Motors the managers who worked with Sloan had the power to put into place the new product strategy, “power in the broadest sense of command over resources to facilitate the transformative capacity of action” (Macintosh, 1994, p.188). In the case study of the University of Wisconsin, the state exercised its power through both allocation and authorisation power. The University exercised some power in trying to change the signification scheme to force the state to make hard decisions. Laughlin shows how the power relationships differ between the various parties within the Church of England and how there can be conflicting power relationships with one party holding allocative resources and the other authorisation power.

### **3.4.3 Conclusion from Structuration**

If structuration is not accepted as another “Grand Theory”, it can act as a sensitising device to help the researcher make sense of accounting during organisational change, both through the process of human agents changing the structures as they reproduce them and particularly at those crises points where an organisation changes. The stability of world views of the individual coupled with routine is important to an actor in an organisation. When those routines are broken by ‘critical situations’ the certainties of institutionalised routines are broken. It was at one of these points of crisis that Sloan came into GM and was able to change the routines; a task that subsequent managers found much more difficult. Accounting is one of the

routines that can be involved in signification, legitimation and domination of organisational life. Accounting may be used in changing the meanings, norms and power relationships.

### **3.5 Descriptive and Ethnographic Perspectives**

This range of studies do not appear to have any specific theoretical framework, and yet yield insights about the role of accounting in organisational change. Three particular examples are chosen here. A well-known study is Dent's (1991) research at Euro Rail. Dent traced the advent of Business Managers to bring about a change in culture from railway experts. But there was not only a change in labels there was a change in the visibility of costs as all costs had to be attributed. The economic became visible, and in the subsequent clash between the railway and business cultures, the business culture became more entrenched. Accounting helped shift the view of the organisation in looking to markets for subsistence rather than the state.

A similar change in culture is identified by Ogden (1995) in U.K. water authorities, although the existing engineering culture was not completely overwhelmed. Accounting was used to transform the organisation. There was a period when a new vocabulary of costs was brought in to help the organisation respond to government financial targets. Subsequently, as the water authorities were prepared for privatisation, the vocabulary shifted to profits. A further analysis of U.K. water authorities by Ogden and Anderson (1999) probed how accounting was imposed during organisational change to support a change in culture away from public service to profitability. Although managers were seen to be empowered by more information, it acted as a two-edged sword: "...there is little doubt that their use of accounting and accounting information provided the primary medium through which the rhetoric of empowerment was translated into the realities of accountability" (p.120). New expectations of accountability were created and managers' performance became more visible. Accounting could not be welcomed for it was one of the tools "used by those with power in the organisation to impose their own

definitions of the corporate world they wished to create on other organisational members” (p.121).

Ezzamel, Lilley and Willmott (1997) researched the role of accounting relative to other management techniques during organisational change. Although the number of accountants declined in the firms under study, it appeared that accounting could reinvent itself to be relevant to the new situation of an organisation. Even changing forms of accountability by flattening the structures and empowering workers was accompanied by new forms of accounting to increase the visibility and hence control. Their research identified the ability of accounting to reinvent itself to be relevant to changing conditions.

Although the authors have researched accounting and organisational change from different standpoints they have reinforced the three roles of accounting in organizational change (Hopwood, 1990). All these studies confirm the power of accounting to be implicated in, and changed by organisational change.

## **3.6 Critical Perspectives on Accounting**

### **3.6.1 An outline of the theoretical position**

Some of the work which is viewed as critical has already been included in the sections above. Critical work might encompass the work of Laughlin built from Habermas and the structuration research. What constitutes critical perspectives is in itself problematic. The Miller and O’Leary (1994) analysis of Caterpillar is not seen as sufficiently critical because it excludes “all traces of class conflict and historical materialism in the very domain where Marxian analytical concepts are most powerful, the domain of production” (Arnold, 1998, p.666). Critical accounting researchers are concerned that accounting can be used by management as an instrument of coercion, to pressure certain behaviours in employees and reduce the

role of labour. Labour process theory, expounded by Macintosh (1994) and Puxty (1993) concentrates on the commodification of labour and the de-skilling of labour. The work of Michael Foucault has been used by management accounting researchers to implicate accounting as another disciplinary system (Puxty, 1993; Macintosh, 1994). Management accounting acts as a system of surveillance and power that enables managers to control decentralised operations from a distance. Managers and workers might seemingly be empowered, but they are kept in a panopticon of reports and meetings.

### **3.6.2 Examples of research in organisational change using critical perspectives**

There is a paucity of critical writings, apart from those covered in the previous sections, that examine organisations undergoing change. For example, Miller and O'Leary (1987) has been very influential but it does not address management accounting at an organisational level. One example using labour process theory and one using Foucault illustrate the critical approach.

Ezzamel et al (1998), used labour process theory to explain the processes of change in an organisation and particularly the role of new accounting techniques being used in the new organisation. Although these new techniques might match an organisation going through change they may be tools of control as much as technical systems of improvement. Ezzamel et al (1998) reflect on worker's impressions of these calculative regimes as means of subordination; "Alternative management accounting techniques such as ABC ... were simply seen by workers as a means of subordinating them and rendering their performance easier to manipulate by management" (Ezzamel et al, p.36). Not only was ABC not relevant to the situation of the "Plant with a Problem", Ezzamel et al, it was resisted by workers who did not wish to submit to another instrument of management intrusiveness.

Ezzamel (1994) used Foucault in conjunction with Latour to explain the budgeting system in a U.K. university. The new budgeting system made the financial changes

more visible. This meant that the new system did not act as a disciplinary regime because it was used by the constituents of the organisation to argue for a much different strategy to respond to the budget cuts. Other forms of discourse outside of accounting combined with the accounting issues to stop the planned changes. Although other practices were important, accounting was the most significant force to repel the changes. Ezzamel shows that senior managers may seek to use accounting for their ends but it can be turned back upon them and used to resist change. Those in opposition to the changes could mobilise resistance because they had the technical knowledge of the budgeting system. This is a unique case; the level of consciousness of change, the will to mobilise and the technical knowledge may all be greater in a university than other types of organisation.

There are few other good examples of critical research relevant to accounting and organisational change at a micro level using Foucault or labour process theory.

### **3.7 Conclusion**

This chapter has outlined some of the theories that have been used to explain the role of accounting during organisational change and the impact of accounting as an organisational change agent. It has not sought to be exhaustive, but to concentrate on some of the more important published literature. The diversity of perspectives produces different insights but also some commonality. A common thread is the role of accounting in creating meanings. This can be seen in the use of Laughlin's framework in exploring the role of ABC in operationalising the interpretive scheme (Soin, 1996); as an alternative for caring in Llewellyn's research; and using structuration theory to be sensitised to the new language of accounting in GM under Sloan (Macintosh and Scapens, 1991). Power is another theme; and the relationship of accounting to power and control was developed by researchers using Laughlin's framework (Richardson, Cullen and Richardson); using boundary maintenance (Llewellyn, 1998; Jacobs, 1998); using structuration through understanding

domination; and particularly in the critical studies (Ezzamel et al, 1998). Ogden and Anderson (1999), although not using any specific theory, were concerned that systems that were thought to empower managers were systems of surveillance and control.

With the theme of power is the issue of resistance. Most of these researchers see the role of accounting negatively, as something that would almost automatically bring resistance. Laughlin's framework makes explicit the resistance but it is also there in the boundary maintenance research as well as in structuration. Structuration implies that the reproduction of the routine is the most usual behaviour of agents. Resistance to accounting is central to the critical studies – especially Ezzamel et al, 1998.

In Chapter 8, some of these theoretical frameworks will be used to explore the role of accounting during organisational change at ETSA; and therefore build on this literature. Further commonality and differences created by these theoretical models will be identified in that chapter.

## **4 Research method**

In this chapter, I first explore research methodology and then research method; giving due primacy to methodology, as “interpretive empirical work should be explicitly grounded in a methodology rather than a method” (Llewellyn, 1993, p.233). Methodology reflects the ontological and epistemological beliefs of the researcher, while method concerns the specific research practice (Llewellyn, 1993). In the following sections I explain the development of theory informed by the grounded theory of Glaser and Strauss (1967). I sketch the development of grounded theory and discuss its usefulness to accounting research. I then explain the specific research methods used including the use of computer software for qualitative data analysis. This chapter reflects on my growing understanding of my ontological and epistemological assumptions.

### **4.1 Theory development**

#### **4.1.1 Introduction**

In this study I initially used an inductive approach to theory development, rather than use existing theory from the outset. An inductive approach may provide fresh insights that the use of pre-existing theory may not (Mintzberg, 1979; Glaser and Strauss, 1967; Bruns and Kaplan, 1987, Covaleski and Dirsmith, 1990). It is also most effective when an area is in the early stages of development (Kaplan, 1994), as the study of ABC, particularly in the public sector, was at the commencement of this research. In the early 1990s much of this research did not use clearly defined theoretical frameworks (eg. Innes and Mitchell, 1990; Norris, 1994). Since then there is considerable amount of research with a theoretical framework as the base, including research using surveys (Shields, 1995) and field research (Anderson, 1995).

The use of grounded theory research for accounting research has been advocated in two recent papers (Parker and Roffey, 1997; Lye, Perera and Rahman, 1997). Despite the strong presence of grounded theory research in health and nursing fields (Chenitz and Swenson, 1986), Parker and Roffey (1997) identify only four papers in the accounting literature<sup>8</sup> which use a grounded theory methodology, reflecting a continuing “bias against grounded theory” (Hopper and Powell, 1985, p.455). Often placed in the interpretive domain of research (Parker and Roffey, 1997), it is now being offered as a method for the accounting researchers to develop theory.

Grounded theorists, including those in accounting, believe that they have a distinct advantage in not working with hypotheses or formal theory. However, interpretive researchers may still be constrained by prior theory, which restricts the interpretation (Covaleski and Dirsmith, 1990). Llewellyn (1993, p.234) asserts: “where a prior theoretical framework has been adopted by interpretive management accounting researchers, such a framework, rather than constituting a methodological stance, has tended to form the explanatory medium through which the research findings are interpreted”. Similarly critical theorists may be criticised for having their interpretation dominated by particular social, economic or political ideologies (Parker and Roffey, 1997).

Nursing research has enthusiastically embraced grounded theory approaches and the nursing literature now contains literally hundreds of published papers using grounded theory method (Benoliel, 1996), and nursing has a significant contribution to make to the development of grounded theory. The influence of Glaser and Strauss on nursing research is not surprising since they both held academic positions for significant periods in nursing at the University of California - San Francisco. In particular, Strauss joined the University in 1960 and retired in 1987, but continued

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8 Two of these papers (Covaleski and Dirsmith, 1986; Covaleski and Dirsmith, 1988) are recognised by their authors, Covaleski and Dirsmith, as ethnographic and not grounded theory and one of their grounded theory papers is not cited by Parker and Roffey, Covaleski and Dirsmith, 1984.

teaching and researching until his death in 1996. The impact of this sustained activity was a large number of doctoral graduates in nursing, whose basic research training was in grounded theory (Benoliel, 1996). The writings of Glaser and Strauss and a range of conferences diffused the grounded theory method to scholars in other disciplines.

#### **4.1.2 The Development of Grounded Theory**

Grounded theory has been defined in its most general form as “the discovery of theory from data” (Glaser and Strauss, 1967). Glaser and Strauss’ 1967 book was sub-titled “Strategies for Qualitative Research” and although the book sketched the process of comparative analysis and the development of theory, its “strategy” appeared to lack clear procedures for the generation of grounded theory. Over the last thirty years there has been a flow of books and articles, both explaining more fully the method (eg. Glaser, 1978; Strauss, 1987) and publishing results based upon it.

In 1990 there was a rift in the grounded theory area when Strauss joined partnership with a nursing researcher, Corbin, to produce a more clearly defined system of developing grounded theory (Strauss and Corbin, 1990). Their definition of grounded theory was "a qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon" (Strauss and Corbin, 1990, p.23). Glaser was disturbed by many aspects of the book and argued that the “new” more prescriptive approach was forcing the data rather than allowing theory to emerge (Glaser, 1992). He redefined grounded theory as “a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive theory” (Glaser, 1992, p.16).

Although there are differences between these authors there are some tenets of grounded theory which are rarely disputed. They are:

1. constant comparative analysis - which is performed throughout comparing case with case and data with data.
2. category formation - categories are formed from codes (Glaser, 1978). A core category is arrived at which explains how a problem is processed.
3. theoretical sampling - previous data collection informs who will be interviewed or what data are to be collected.
4. saturation - sampling continues until the category is refined and elaborated and no contradictory evidence emerges.

It is important to note that grounded theory was “rooted” in symbolic interaction (Stern, p.215; see also Bowers, 1988; Layder, 1993; Chenitz and Swenson, 1986; Lye, Perrera and Rahman, 1997). It is the aim of researchers using grounded theory “to construct what the interactants see as their social reality” (Stern, p.215). These historic roots can be a limitation to researchers who do not share the assumptions of that school of thought. Some grounded theorists have developed more critical approaches (Annells, 1996). Layder (1993), in particular, has criticised grounded theory for its lack of view to context because the symbolic interactionist researcher is too immersed in the situated activity of the participants in a research setting to take account of history and context. His alternative research map also builds in macro social organisation, the intermediate social organisation, and the self-identity of the individual’s social experience. I will draw from Layder’s ideas later in the chapter.

Some of the confusion in grounded theory relates to the variety of methodological stances and methods which are labelled as grounded theory. The grounded theory approach cannot be expected to be rigid and prescriptive, although there must be some central tenets of the approach. Charmaz noted in relation to the work of Glaser and Strauss: “Although I attempt to be faithful to the form and logic of their approach, over the years I have developed my own style of using grounded theory”

(Charmaz, 1994, p.160). May expressed the difference in grounded theory approaches: "...we... have come across the general forms of the process we have come to call grounded theory. ... and they are different in some fairly interesting ways" (quoted in Morse, p.211). In the nursing area alone there were at least 146 refereed articles between 1990 and 1994 which were based on grounded theory, but of these only 33 could strictly be classified as grounded theory (Benoliel, 1996). A range of variations have come from the grounded theory method developed by Glaser and Strauss (1967), but "a child once launched is very much subject to a combination of its origins and the evolving contingencies of life. Can it be otherwise with a methodology?" (Strauss and Corbin, 1994, p.283).

Four particular schools of grounded theory appear to exist:

1. Glaser's emergent approach, best reflected in Glaser (1978).
2. Strauss and Corbin's (1990) structured approach.
3. Dimensional analysis of Schatzman (Schatzman, 1991; Kools et al, 1996)
4. Students of Strauss who adhere to his general approach but do not agree with the Strauss and Corbin (1990) approach. These follow Strauss (1987).

Various efforts have been made to compare the differences in these approaches, but they primarily focus on the divergence between Glaser and Strauss (Stern, 1994; Parker and Roffey, 1997; Lye, Perrera and Rahman, 1997).

It has been argued that historically the research endeavour of Glaser and Strauss was formulated from a post-positivist stance (Annells, 1996). Evidence for this belief is particularly found in the writings of Glaser who assumes an objective reality, "true meaning" (Glaser, 1992, p.55). Glaser as an objective researcher (Glaser, 1992) wants to build "scientific facts" (Glaser, 1992, p.30). The work of Strauss and others adopts a more relativistic approach to ontology and epistemology (Annells, 1996), by accepting a "reality that cannot be known, but is always interpreted" (Strauss and Corbin, 1990, p.22). It also recognises the subjectivity of the researcher who is never "neutral, detached and objective" (Bowers, 1988, p.43). Strauss and Corbin appear

to have moved grounded theory to a more interpretivist (Parker and Roffey, 1997) or constructivist (Annells, 1996) stance.

The approach of Strauss and Corbin (1990) specifically includes contextual issues beyond the actors' views. However, grounded theory researchers who do not accept the Strauss and Corbin paradigm would still argue that the researcher should go beyond the experience of the actors. For example the idea of 'marginality', keeping one foot outside of the research environment, is suggested as an approach (Bowers, 1988). Some researchers believe that grounded theorists can moving into post-modernist or critical research, but that relies on shaking off its roots in symbolic interactionism and its claims to theory construction (Annells, 1996).

The work of Strauss and Corbin has provided a rigid procedure. Glaser (1992) argues that this creates a forcing of data into a model, and thereby cuts off the development of interpretations by the constraining of theory into the paradigm model. For this reason it has been seen as "a densely codified strictured operation" (Stern, 1994, p.220), rule bound and formulaic (Melia, 1996).

### **4.1.3 Grounded Theory and Accounting Research**

The take-up of grounded theory method in accounting has been more limited than in areas such as nursing. This in part is a result of grounded theory being identified as a "craft" (Martin and Turner, 1986) passed on by an oral tradition and mentoring (Charmaz, 1994; Stern, 1994). With limited access to such tradition, accounting researchers who claim to use grounded theory are more likely to have learnt "it from a book or, more likely a book chapter or, with no reference from which to work, decided to manipulate the data in any old way and name it grounded theory" (Stern, 1994, p.213). The danger is that as grounded theory becomes more popular it will be used by accounting researchers as a label to cover content analysis (Morse, 1994) and general qualitative approaches, lacking clear conceptual foundations and "imprecise application" (Annells, p.391). Richards and Richards (1999) observe that

one of the problems with grounded theory is that “anything supporting category construction and linking of category to data gets labelled as grounded theory”.

It would not be surprising if the more structured approach of Strauss and Corbin (1990) appealed to accounting researchers because of the attractiveness of its precise procedure and structure to researchers brought up with the order of conceptual frameworks, and with backgrounds in quantitative methods. However the adoption of Strauss and Corbin may create forced research where the “procedures are getting in the way” (Melia, 1996, p.376).

The development of a range of approaches to grounded theory makes the delineation of what is grounded theory more difficult. Is this grounded theory or a qualitative research approach which has been labelled as grounded theory, “a nod in the direction of general direction of grounded theory and then a progression to a generalised qualitative analysis” (Melia, 1996, p.376). It may be argued that it does not matter - grounded theory can be “make-it-up-as-you-go-along” (May, in Morse (editor) 1994).

Two issues arise here. Firstly, grounded theory does have some core principles of method. There cannot be a stop to the development of grounded theory and the range of research endeavours that derive from Glaser and Strauss (1967). However, labelling research as “grounded theory” when it does not follow the core principles may be to misuse grounded theory as a legitimisation device for broader qualitative methods. Secondly, if a researcher wishes to use a “make-it-up-as-you-go-along” form of grounded theory, then the researcher needs to explain how they developed their form of grounded theory.

In Table 4.1 there is a brief analysis of a selection of papers in accounting research using grounded theory methods. The first column relates to the explanation of the theory building process. The next three columns relate to the core concepts of grounded theory as identified in section 4.1.2.

**Table 4.1 An Analysis of Grounded Theory Research in Accounting**

	Grounded Theory Approach	Explanation of Theory Building Process	Comparative analysis	Theoretical sampling	Iterative process of data collection and analysis
Covaleski and Dirsmith (1983)	Glaser and Strauss (1967)	No	Yes	Not stated	Yes
Covaleski and Dirsmith (1984)	Glaser and Strauss (1967)	No	Not stated	Not stated	Not stated
Czarniawska-Joerges (1988)	Glaser and Strauss (1967)	No	Yes	Not stated	Not stated clearly but appears not
Parker (1996)	Strauss and Corbin	Limited	No	Not stated	No
Bruggeman and Slagmulder (1995)	Strauss and Corbin	Not stated	Not stated	Not stated	No
Innes, Dixon and Tagoe (1996)	Strauss and Corbin	Yes	Not stated	Not stated	Not stated
Norris, Innes and McCrae (1996)	Strauss and Corbin	Yes	Not stated	No	No
Lye (1997)	Strauss and Corbin	Yes	Yes	No	Yes
Baxter (1998)	Strauss (1987)	Yes	Not stated	No	No

Several conclusions can be drawn:

1. Early grounded theory work in accounting was developed from Glaser and Strauss (1967). Recent accounting researchers appear to have found the more prescriptive approach of Strauss and Corbin (1990) more satisfactory.
2. Published papers in accounting using grounded theory do not necessarily specify their method. This may be the result of space constraints but a

clearer explication of method would be helpful to the reader to judge the research approach. Discussion with more than one author of these papers suggests that a predominant reason may be that editors may be concerned about the use of grounded theory and have convinced authors to eliminate all reference to grounded theory.

3. Accounting researchers have claimed to use grounded theory but do not appear to have followed the basic processes of the method especially the constant comparative method. In particular, data analysis appears to have commenced at the end of data collection not during the process.

In order that grounded theory increases in respect as a research method, accounting researchers should be clear about their methodology and method and explain both. Care should be exercised in claiming that research uses grounded theory when it is inconsistent with the basic approaches of grounded theory.

#### **4.1.4 The Use of Grounded Theory in Accounting Research**

Although grounded theory has been put forward as “a potentially valuable part of the qualitative interpretive field research tradition” (Parker and Roffey, 1997, p. 243) there are reasons to believe that this is not an all embracing approach for interpretivist accounting researchers.

Fundamental to its adoption is the need to match the method with the ontological, epistemological beliefs of the researcher (Annells, 1996). The very nature of the Strauss and Corbin paradigm model may make it attractive to positivist researchers, who are attracted to a highly procedural approach, with little empathy for the philosophical tradition from which it has been derived. Researchers whose background is in phenomenology or ethnography can distort grounded theory and carry over their previous beliefs (Stern, 1994; Benoliel, 1996; Baker, Wuest and Stern, 1992).

A further issue is that because grounded theory comes from sociology rather than psychology, the research “questions” addressed by grounded theory are questions of process, and therefore relate to “how”, rather than the social psychological questions of “why”. Grounded theory is not applicable to a range of research endeavours.

Grounded theory is more likely to be useful in new situations or gaining a new point of view in familiar settings (Stern, 1980) but may not be applicable to already well developed areas of knowledge. For example, it is unlikely to be useful in investigating participation in budgeting where the variables are robust and the methodology is well established. It may be useful to explore the nature of the participation process in team based cultures.

Any attempt to use grounded theory universally may increase the “minions of mediocrity” (Stern, 1994, p.214).

#### **4.1.5 The Critique of Grounded Theory**

Grounded theory comes under attack from positivist or functionalist researchers and from researchers with a critical perspective. Functionalist researchers perceive it as having the same faults as other interpretivist approaches; it lacks external validity and is useful for exploratory research only which can be tested by more rigorous research (Scapens, 1990). The functionalist researcher assumes an objective reality and objective researchers, a quite different ontological stance. The insistence of functionalist researchers that interpretive research should meet their standards of validity and reliability is simply to keep talking past non-reconcilable differences. While the interpretive researcher will attempt to draw in context, the functionalist researcher attempts to explain a small number of variables while controlling for other variables.

The critical researcher will reflect that the grounded theorist is trying to take “a fresh start, open to the emergent” (Glaser, 1992, p.15), a stance which is impossible. Rather than being open to emergent theory, the researcher may be blinkered in what

they observe by prior theoretical stances and biases. The solution for the grounded theorist is to write a reflexive account, acknowledging as many pre-conceived positions and changes of positions as a result of the research process; for *“The purpose of field work is not to strip ourselves of biases, for that is an illusory goal, nor to celebrate those biases ... but rather to discover and change our biases through interaction with others”* (Burawoy, 1991, p.4).

In the end the research is an account of the process under study. Other researchers with other priors will observe, record and analyse quite differently and therefore their “insights are inevitably subjective because no knowledge is generated distinct from the observer whose reasoning and experiential powers are not uniform or determined” (Laughlin, 1995, p.71).

#### **4.1.6 The Use of Grounded Theory in This Research**

I have adopted an approach more consistent with the writings of Glaser, although I have been willing to step beyond the interpretations of the actors; and like Annells (1996) I have adopted a more critical approach to grounded theory. As previously stated, grounded theory is not rigid and prescriptive (Charmaz, 1994).

While recognising some differences, there are a number of key issues in grounded theory which I maintained in this research. They were:

1. “the grounded theory researcher ... moves into an area of interest with no problem” (Glaser, 1992, p.22). The research question as stated at the start of the research was an area - the connection between ABC and its social and organisational context.
2. “the researcher should ... learn not to know, when telling others or himself what he is studying” (Glaser, 1992, p.24). This was followed in attempts by the researcher to avoid the research subjects knowing his own financial management background, or at the least minimising this to avoid bias in the

answers towards financial issues. It was also important not to give the idea that the interviews were just about ABC, but to introduce the purpose of the interview in a general way. Interviewees were asked a broad range of questions and they needed to be prompted to answer them in a wider context than ABC. The ABC questions were usually the shortest part of the interview and were left to the end.

3. a modicum of theory should be used at the start of the research, but in the sorting and writing stage “the researcher-analyst by constant comparison reconciles differences, shows similarities in patterns, and imbues his work with the data and concepts in the literature” (Glaser, 1992, p.33). The research process did not therefore draw immediately from the literature but was tied back to the research literature at the end of the process.
4. the constant comparative method should be used - Although I did not start with a pure constant comparative method, as the research developed I used the constant comparative method frequently.

With these similarities there came a range of differences from grounded theory. Even in the early stages, I did not model the research solely on Glaser and Strauss. An essential element of true grounded theory is that “data collection and analysis proceed simultaneously” (Charmaz, 1993, p.96). As Glaser and Strauss expressed it: “Research aimed at discovering theory ... requires that all three procedures (data collection, coding and analysis) go on simultaneously to the fullest extent possible” (Glaser and Strauss, 1967, p.71). In line with the practice of other grounded theory researchers in accounting at the time, and with several published papers using grounded theory, I did not commence formal data analysis until the first set of interviews were completed.

I justified this approach on the grounds that I was trying to discover the views of employees at different levels of management and was cautious about the way in

which views of senior managers and my emerging views would colour the questions I was asking to employees in the lower levels of the organisation. Subsequent reference to the interview transcripts shows that I was sub-consciously using the constant comparative method to develop additional questions and probe explanations made by interviewees. However on a few occasions the questions were coloured by emerging views, for example: “So it doesn't affect you at all, you don't have to worry about your hourly charge rate or you don't get queries from the zones on your cost or anything like that” or pre-existing views “What about your team leaders? Do you really function as teams?” It is naive to assume that the researcher is unaffected by the process, just as it has been well argued that the researched are affected by the research (Llewellyn, 1993). My notions of “purity” were naïve, but not prejudicial to the final outcomes.

Following the first stage of data collection, I did proceed to data analysis and used the results of that to inform the questions and approach in a second stage of interviews. Having not strictly followed the simultaneous collection and analysis of data the concept of theoretical sampling was not also not strictly followed. Late in the research, I used a further series of retrospective interviews to confirm some of the theoretical perspectives being developed. The concept of saturation used in this research was to explore a code thoroughly to ensure that the code was refined to reflect all of the data. This at times included amalgamation of codes or dividing them up.

I have made a further departure from Glaser and Strauss (1967) to build explicitly on social and historical dimensions beyond the frame of reference of the actors in the situation, as discussed in 4.3. Although the research is informed by the grounded theory perspective it is not governed by it. In the milieu of Layder (1993) I have taken account of context, setting and self. I have gone beyond the accounts of the actors, by using more contextual and historical information. In a sense the grounded theory researcher should always go beyond the experience of the actors by ‘marginality’, keeping one foot outside of the scene (Bowers, 1987).

A procedural difference to the later works of Glaser and Strauss (for example, Strauss, 1987; Glaser, 1992; Strauss and Corbin, 1990) was to move away from three levels of coding - open, axial and selective; to two levels of coding - initial and focus (Charmaz, 1994). In initial coding, the researcher “pursues as many diverse avenues as he or she can create” (Charmaz, 1994, p.101). In focused coding, the researcher develops categories and their associated properties. This change of coding emerged at the analysis stage.

One final problem in the use of grounded theory for this research was the use of the idea of an “incident”. This is satisfactory in the development of a grounded theory in the areas of sociology from which it was derived (Glaser and Strauss, 1967) but may not be useful in the management area where the research may be seeking opinions, attitudes and reflections on a system or direction. There may not be “incidents” to comparatively compare. This was particularly important as the current research became more longitudinal and reflective, rather than a review of social practise at a single point in time.

The approach is therefore based on grounded theory but not exclusively tied to it.

## **4.2 The Role of the Researcher**

The research process itself must be a learning experience for the researcher and this researcher shares the experience of Covalski and Dirsmith (1990, p.566) that “the ontological and epistemological assumptions with which a researcher can function effectively emerge from, or at least interact with the act of doing research.” Whereas some ethnographic researchers may claim that they can understand the meanings of the researched without theory, there is no possibility of approaching the research without conscious or unconscious theories. There is an advantage for both the researcher and the reader of research to clarify their theoretical positions (Hopper and Powell, 1985; Smith, Whipp and Willmott, 1988). Tinker (1996) explores the

attempt by Preston to suspend his “intellectual baggage”, which is not achievable “because the remnants of one’s intellectual baggage are always present” (Preston, 1991, p.56). In the early stages of this research I believed that I was approaching the research task without theory. It was only later that I became more conscious of these implicit beliefs. My beliefs were moulded by what Puxty (1993) calls the traditional paradigm. They included that:

- accounting improved organisational life and that better accounting would improve efficiency and effectiveness.
- there should be an emphasis on the need for efficiency, a lack of conviction that this was present in the public sector and therefore an implicit belief in the value of outsourcing.
- ABC would be likely to cause an improvement in information and decision-making with resulting favourable not neutral attitudes towards ABC.
- responsibility accounting was desirable, and that ABC could improve it.

These beliefs were challenged and discarded or modified by the research process.

In this sense it may be argued that it is not possible to undertake true grounded theory because the theories that emerge are always to some extent the product of the researcher’s mind.

The presence of the researcher also changes the researched (Gummesson, 1991; Gergen and Gergen, 1991). In particular, the interview process may well have helped staff clarify understandings and arrive at new perspectives.

### **4.3 Beyond Interpretivism**

The beliefs and attitudes of the actors in the organisation cannot be divorced from the social structures and historical forces in which those actors move. Yet the actors cannot be conscious of all of the social forces. The insights of the researcher may “transcend or differ from the insights of the researched” (Llewellyn, p.239), because

the researcher may draw upon the social in a way in which the researched may not. I offer insights based on a synthesis of the views of the researched as well as those which are clearly my own.

Puxty (1993) identifies seven areas of difference between positivist, naturalistic and critical researchers in management accounting. The table below lists part of the Puxty analysis, taking up the issues that relate to the limitations of interpretivism. Critical research may seem to provide greater meaning than can be elucidated by the understandings of the observed. I would argue that the lack of critique is a problem in this research, but in the last column I show how in this research I have tried to meet some of Puxty's concerns about the limitations of the interpretive work.

Although the research is in the interpretivist tradition it does draw out social, historical and contextual information beyond interpretivism. It therefore aims to overcome several of the claimed disadvantages, especially the lack of importance of power relationships.

**Table 4.2 Extending beyond interpretivism (extended from Puxty, 1993, pp.94-95)**

Questions	Remaining problems of interpretivism	Insights from a critical perspective	Method of resolution in this study
<p>What are organisational goals?</p> <p>What is the focus of analysis?</p> <p>What image of organisational reality is presented?</p> <p>What is management accounting?</p> <p>What does management accounting provide?</p> <p>How is the historical development of accounting explained?</p> <p>Whose interests are served by management accounting?</p> <p>What is the conceptualisation of deviance?</p>	<p>Neglect of organisational goals as articulations of vested interests.</p> <p>Neglect of institutional analysis.</p> <p>Inadequate explanation of the persistent conflict and the elements of compliance.</p> <p>Inadequate theory of power and control.</p> <p>The partial and interested language of accounting information.</p> <p>The absence of a political basis to historical analysis.</p> <p>Failure to grasp the class structure of managerial work.</p> <p>Deviance not understood in relation to the basic structures of organisation and society</p>	<p>Reified devices that channel and legitimate sectional interests.</p> <p>The role of management accounting in the institutionalised support of labour.</p> <p>The organisation is a site of class struggle and domination.</p> <p>Controls as congeries of devices shaped by and reinforcing the dominant mode of production.</p> <p>How accounting language serves and legitimates sectional interests.</p> <p>Seen to emerge largely in response to crises and opportunities presented by the unfolding and contradictory logic of CMP.</p> <p>Accounting ... largely fashioned to meet the needs of capital, though demands also shaped by the demands of inter-professional competition.</p> <p>Deviance arises out of the efforts to secure control over recalcitrant labour.</p>	<p>Clear recognition of conflicting goals. Take account of goal conflict in exploring the role and impact of ABC.</p> <p>Focus on the forces shaping the institution and its impact on the individuals.</p> <p>Explore the existence of resistance to accounting and managerial policies.</p> <p>Explicitly account for the top-down nature of controls and resistance to controls.</p> <p>Analyse accounting language for its potentiality to legitimate sectional interests.</p> <p>This analysis will fall short of a full historical analysis but will address the issue of how historical forces have shaped accounting practice within the organisation.</p> <p>In the public sector context this research should identify how Federal and State government ideologies are met by accounting.</p> <p>Identify deviance and the actor's explanations for it.</p>

## 4.4 Data Collection

I chose a site which conformed to the requirements in the previous chapter. It was:

- a service organisation
- using ABC
- accessible for a longitudinal study

The organisation was selected as an appropriate site and then access was requested. Full and open access was available at most stages of the research. There was only one stage when a manager in the organisation believed that the presence of the researcher would jeopardise a delicate process of change, and asked him not to attend a meeting or to see certain documents. This did not create major gaps in the data collected.

Data came from the following sources:

- memos and internal correspondence relating to ABC, as well as to management policies in general. This information was collected over the two years of data collection. The most significant documentation included:
  - the original consultant's proposal
  - final report of the consultants
  - performance review document
  - major benchmark review documents
  - annual reports

- interviews. The main interviews were through vertical slices of the organisational hierarchy. Influenced by grounded theory I believed that the theory development would be aided by theoretical sampling, which took account of the views of subordinates. Previous qualitative accounting researchers have found value in identifying differing views through the hierarchical levels of the organisation (Covaleski and Dirsmith, 1990). A copy of the interview protocol is in Appendix A. Eighteen of these “standard” interviews were undertaken during the period of March to September 1994.

The interview protocol used was obtained from Dr. Rolland Munro who had used it with Ph.D. students at the University of Edinburgh. It was originally designed for an ethnographic approach to research, where the researcher intrudes as little as possible and allows the organisational participants to communicate their views and attitudes rather than using their previous beliefs to shape a series of specific questions. It was useful as a starting point for my research as it avoided leading the interviewees down any predetermined track. The views of previous interviewees and discussions did change the line of questioning as the research continued. The recording of one of these interviews was unsatisfactory and notes taken were inadequate; the views of the interviewee were not formally included in the research.

Other interviews proceeded during 1996 with staff specifically involved in the preparation or use of ABC data.

I conducted follow up interviews of some of the original group of interviewees in the period of March to August 1997. The purpose of these interviews was to seek the views of the participants as to the validity of the model of the grounded theory. In a relatively unstructured interview, information was also sought about the following:

- the nature of the change process and its effects within ETSA.

- the nature of management and financial management in 1994.
- an analysis of the advantages and disadvantages of both management and financial management directions in ETSA.

Not all of the original interviewees needed to be interviewed again because there was reasonable consensus of views amongst the interviewees.

All interviews were taped and transcribed.

- observation of meetings principally during 1994 but also in 1995 and 1996. Meetings attended included two departmental management meetings and three team meetings. Other meetings attended were informal gatherings of two or three staff to review costing. This process involved summarising verbal communication, and noting non-verbal communication and the physical environment (Gummesson, 1991).
- telephone conversations. At various stages of the study contact was maintained by telephone with some individuals, usually accounting staff with the primary responsibility for implementing the ABC system. Notes were made during and after the conversation and the more lengthy notes were transcribed. In particular, five detailed conversations were transcribed. After relationships of trust had been established the use of telephone links was important to keep track of changes over time.
- conversations. Outside of the more structured interview process, formal and informal discussions took place. Notes were made of formal discussions and they were typed up and included in the data. The principal discussions took place with the replacement manager of the division and with three of the accountants. I also sat in the cafeteria and entered into conversations. On some occasions employees approached me directly to tell me of their views, usually of management.

- newspaper reports and other external information about ETSA. All newspaper reports that related to ETSA were extracted for the period of January 1993 to December 1997 from “The Advertiser”.

The following sections describe the interview process.

## 4.5 The Interview Process

Four out of eight sections of the department (see Figure 1.2) were selected for primary focus. The four were chosen by concentrating on line rather than staff sections, as I was more interested in the wide impact of ABC in the large operating sections than the support sections. Where there were both development and maintenance sections for the same service, only one of the two was selected.

In each area the section manager was selected for interview. Then one or two of his subordinates were selected by the researcher. Then that person selected a subordinate to interview. This selection was sometimes biased to someone not regarded as a ‘ratbag’. This biased the interviews to people who were viewed as more compliant with management, whereas previous researchers have seen value in using informants who are “constructive heretics” (Covaleski and Dirsmith, 1990). There was limited opportunity to interview people who worked most of the time outside of the metropolitan area. From a grounded theory perspective this reduced the opportunity to find disconfirming cases.

The location of the interview was usually chosen by the interviewee and was generally a quiet office near their work locality. I attempted to relax the interviewee; using general discussion to produce a less threatening atmosphere where the interviewee felt comfortable to be open. This was not necessary in the second stage interviews, some of which were held in the interviewee’s home.

Then I discussed the purpose in conducting interviews, discussed the consent form, and asked the interviewee to complete it. The issue of taping was included in this. No potential interviewee declined either to be interviewed or taped.

The semi-structured interviews started with general questions about the individual and were designed to elicit responses which gave the individuals' views about their role in the organisation. It was crucial to identify the participant's view of the organisation and therefore provide a background to examine the importance or unimportance of ABC in the minds of the employees. The more specific questions on ABC identified the attitudes towards and the use of ABC in the organisation from the view of the participants.

The interviews took usually an hour and a half, with some as short as 45 minutes. They aimed to draw out issues relating to routines, contacts, priorities, problems and successes. The prime questions enabled interviewees to talk generally about the issues that they believed were important in the work place and facilitated the recollection of significant experiences. Follow on questions enabled the exploration of what the interviewee considered to be key issues in more depth. Given that interviewees knew that the researcher was interested in ABC, it was not surprising that some wanted to try and give answers directed to financial management issues rather than explaining their view at the broadest possible level. This perhaps created some bias in the answers towards the importance of finance and accounting in the organisation.

During the interview I endeavoured to give undivided attention to the interviewee. Some notes were made of questions that need to be raised later in the interview or key issues to be followed up. After the interview I recorded general comments about the interview including:

- any specific issues about the interview setting
- overall impressions of the interview - key issues



- impressions of the interviewee - body language, confidence, attitude

Tapes were transcribed; the transcriptions needed to be audited because of some selectivity by the transcriber, for example, in removing the “mumbles” at the end of sentences, which often contained interesting issues.

The follow-up interviews in 1997 were less structured. I verbally described the model of chapter 7 and asked them to comment on it. I gave them opportunity to provide a retrospective of the period from 1994 until they left the organisation. Those who were still employed by ETSA provided descriptions of the changes that had gone on. It was difficult to track down all the people I needed to talk to as they had left ETSA or shifted departments.

## 4.6 Data Analysis

The data collected were coded and analysed using a grounded theory perspective and the computer program, NUD.IST. This program enabled line by line coding and the ready amalgamation and reorganising of codes, “splitting and splicing” (Dey, 1993). Each concept becomes a ‘node’ in NUD.IST. At the same time it provides a trail of the changes in nodes, so there is a history of the development of codes. NUD.IST also encourages memoing of emerging issues and characteristics of codes.

The initial coding process left the researcher with a tree structure of concepts and issues that emerged from the data. In the focused coding stage core categories were identified. For example the core category “survival” emerged.

The inductively derived theory led to the development of theory of the relation between accounting and the specific organisational and social context. Not all the nodes developed by coding were used in the development of theory. Some of them were useful in providing rich description of the operational issues involved in the use of ABC. The final process was to connect the theory generated with the literature. Nud.ist version 4 enabled the development of theoretical insights but the building of theory was done outside of the software.

The use of computers has methodological issues involved, unless one adopts the viewpoint of “technological somnambulism” (Pfaffenberger, 1988, pp.14-15) which suggests only efficiency issues are involved. Pfaffenberger (1988) is concerned about technological determinism, although some of his argument applies to the misuse of computers and the problems in the early stage of the use computers, and not to the use of computers per se. Weaver and Atkinson (1994) draw together some of the methodological issues involved:

- claims to standardisation and reduction of diversity in approaches.
- encouraging too much data and compromising depth for breadth. The increased efficiency of the computer encourages using higher volumes of data but may in fact reduce the researchers contact with the data.
- apparent claims to be more scientific. The use of a more structured approach clearly does not improve the “scientific” nature of the analysis. The coding and analysis processes may be more structured and efficient but the codes are still constructs of the researcher.
- loss of context. Some computer packages lift text out of context and the researcher loses track of how the codes and concepts relate to the context of the data from which they were drawn.
- the conflation of coding and analysis - coding and analysis work together rather than as separate processes.
- dynamic versus static representations
- the nature of codes - pre-existing or emergent.

I acknowledge that computers have their positive and negative aspects. Richards and Richards (1999) are critical of “unconfident researchers” going down the grounded theory path and using NUD.IST to justify their findings. With this note of caution I did obtain positive benefits from using NUD.IST including:

- increased efficiency of coding which enabled line by line coding. Some grounded theorists have adopted line by line coding because they believe it is critical for allowing the codes to emerge from the data. Line by line coding is cumbersome with paper based methods. Glaser (1978, p.56) writes of coding “for as many categories that might fit”. NUD.IST enables this.
- maintaining a structure of codes and memos which is difficult to achieve on paper. The software allows the researcher to keep track of changes in codes and connections and therefore provides an “audit trail” of conceptual development.

## 4.7 Threats to validity and reliability

The discussion of validity and reliability depends on the epistemological viewpoint of the researcher. Brownell (1995, p.3) asserts that they may take on special meanings in case research but “their fundamental thrust is shown to apply with equal force”. Other authors are more cautious about the meaning of validity and reliability, and recognise that Brownell’s position is far from universal. For example:

- “Such interpretations ... may not be appropriate in case study research, especially holistic research” (Scapens, 1990, p.274).
- “These researchers may therefore reject the formal imposition of such criteria ...” (McKinnon, 1988, p.34).
- “problematic as to the meanings attributed to the concepts of reliability, validity, and researcher detachment by the scientific community” (Covaleski and Dirsmith, 1990, p.544).

McKinnon (1988) argues that even though some case study researchers do not accept that generally held scientific standards of validity and reliability should be applied to their research, these approaches are still necessary to provide standards of credibility of research. Following McKinnon’s (1988) suggestion that validity and

reliability cannot be rigidly distinguished in field research, the latter part of this section delineates how these issues have been addressed in this research.

Validity relates to whether an indicator captures the meaning of the construct the researcher is interested in, whereas reliability relates to its dependability and consistency (Neumann, 1997).

In experimental research internal validity can be defined as “Did in fact the experimental treatments make a difference in this specific experimental instance?” (Campbell and Stanley, 1963, p.5) or more generally “how well the researcher can rule out rival hypotheses or alternative explanations for results” (Brownell, 1995, p.10). The researcher is seeking to remove rival hypotheses and control extraneous variables including history, maturation, testing, instrumentation, statistical regression, selection, experimental mortality and selection-maturation interaction (Campbell and Stanley, 1963; Cook and Campbell, 1979). It is argued that internal validity is reduced by field study (Bruns and Kaplan, 1987).

To increase internal validity Brownell suggests that “the case study researcher must make explicit these rival hypotheses and design their study in such a way as to provide for their assessment” (Brownell, 1995, p.62). His analysis excludes inductive theory development, as in grounded theory, and he looks at the case study as another means of theory testing. The notion of internal validity itself assumes a unique reality waiting to be discovered, and hence replicability is often cited as an essential element of internal validity.

External validity relates to “generalisability” (Brownell, 1995). It is argued that external validity is more likely to be increased in a field setting (Bruns and Kaplan, 1987) than through experimental or survey research. Although field study may overcome problems of mundane realism that may arise in an experiment (Brownell, 1995), the generalisability of a single case has come under question. Whereas some authors in management accounting (Spicer, 1992; Scapens, 1992; Brownell, 1995)

have adopted Yin's (1984) distinction between analytical (or theoretical) generalisation and statistical generalisation; others have criticised this as only applicable within a positivist approach (Llewellyn, 1992). Lukka and Kasanen (1995) identify three positions relating to generalisability in case research:

- that generalisability is not possible
- that generalisability is not desirable
- that generalisability is possible for a properly conducted case study.

Generalisability is not claimed for this case but I believe that:

- evidence that may emerge from this single case that may counter perceived wisdom. This may help to challenge existing generalised conclusions of positivist researchers.
- organisations in similar circumstances may draw some insights from the case.

In relation to external validity, the grounded theorist does this through theoretical sampling.

*“In grounded theory, external validity rests on internal variety. The greater the range and the variation sought through theoretical sampling, the more certain that the data is generalizable (sic) to other members of the same class or units as the phenomena under study”*  
(Chenitz and Swenson, p.13).

Reliability relates to “the ability to measure a variable on one dimension with minimal error” (Brownell, 1995, p.47). Again Brownell suggests: “A case study is said to be reliable to the extent that an independent researcher who follows exactly the same procedures could have performed the study again and arrived at the same findings or conclusions” (Brownell, 1995, p.65).

This is not my position. My presence in the research setting created a different setting. Any other researcher could have collected different information, evinced

different answers from interviewees and observed different issues at meetings. “Since grounded theory is derived from the researcher’s best analysis which includes the researcher’s skill, creativity, time, resources, and analytic ability, no two analyses will be exactly alike.” (Chenitz and Swanson, p.13). Some aspects, such as the coding of data, could be repeated.

Taylor and Bogdan (1984) argue that “whereas qualitative researchers emphasise validity, quantitative researchers emphasise reliability and replicability in research” (Taylor and Bogdan, 1984, p.7). Brownell’s (1995) solution lies in case study protocol and case study database. Case study protocol relies on his premise that “the proper motivation of any research question, whether addressed with case methods or not, will involve the clear identification of that question, the variables, constructs and phenomena which are implicated in it” (Brownell, 1995, p.61); a premise that is denied by the grounded theorist.

It is argued that the use of multiple researchers for both data collection and coding would improve validity and reliability (Walker, 1985; Mckinnon, 1988). However, all researchers are bound by the limitations of their own experiences and constrained by their own theoretical domains. Multiple researchers still face constraints. The information collected and the analysis is the story the researcher tells from their experience.

Some attempts have been made to minimise issues of reliability and validity. These include:

- data collection over three years with variation in contacts with people in respect to time, place, person, and level (Walker, 1985, p.15). This has certainly been addressed by using a longitudinal study. Some issues of selection of interviewees has been discussed above.

- the use of a variety of data collection methodologies including semi-structured interviews, conversations, observation, and written records (McKinnon, 1988).
- being systematic in data collection.

## 4.8 Conclusion

In this chapter I have explained the use of grounded theory in accounting research generally and specifically the inductive approach used in this research. I have used an inductive approach to theory development based on the grounded theory of Glaser and Strauss. Like many accounting researchers I have not followed constant comparative analysis, but have used other principles of theory development espoused by Glaser and Strauss. I cannot accept the limitations of symbolic interactionism or of pure interpretivism and I have therefore been willing to move beyond the views of the actors to draw upon historical context and power as proposed by Layder (1993).

The data were collected over four years 1994 to 1997. Some additional insights have been added from discussions and the media debate relating to the sale of ETSA during 1998 and 1999. A structured approach to data analysis was used. The data have been used in three ways:

- to construct a story of the history of the ABC system in chapter 6. This story uses the data in an ethnographic approach to explain how ABC was changed by organisational change. At the end of chapter 6 I link back to the literature on ABC failure.
- to construct an inductively based model of the development of ABC, as detailed in chapter 7. What were the expectations of ABC and how did organisational pressures and context impact on the Department? This is the

chapter that primarily uses the research method based on grounded theory explored in this chapter.

- to build an understanding of accounting and organisational change in chapter 8. In this chapter I move away from interpretivist approaches to take on some critical perspectives. I had no intention of doing this at the commencement of the research but it became obvious that to add to the literature I needed to take account of the existing literature relating to accounting and organisational change.

Although I started with a grounded theory based approach I have broadened my theoretical perspectives and the method used as the research has changed over time.

In the next chapter I provide the contextual background for my research – the history of ETSA.

## **5 Historical and organisational background to the implementation of activity based costing**

In this chapter, I outline the major external forces, changes in Australia and South Australia, which affected ETSA. I then show how ETSA changed as it responded to the new environment. The chapter sets the context to understanding how the ABC implementation was in part a response to the dramatic changes affecting the organisation.

ETSA went through a dramatic period of change in the late 1980s and 1990s. This was most conspicuously seen in the rapid reduction in size of the organisation and its subsequent break up into smaller segments to meet national competition expectations. Also critical to the context were the general pressures in the public sector, particularly in the South Australian public service. Accompanying this was the trend in the 1990s to the out-sourcing of many operations. This was not only in support functions but also in central service delivery. A brief outline of the major changes during this period is given in Table 5.1.

**Table 5.1 Key Points in ETSA's History - 1985 to 1999**

1985	<i>ETSA Act makes ETSA accountable to the Minister of Mines and Energy</i>
	Appointment of Robin Marrett as first outside General Manager Energy 2000 Report issued
1990	Formation of the National Grid
1991	National Report - Energy Generation and Distribution
1992	Buys No.1 Anzac Highway as Head Office
	Robin Marrett resigns as General Manager; appointed as Chairman Hilmer Report
	South Australian Commission of Audit Electricity Corporations Act passed Clive Armour appointed as General Manager
	ETSA corporatised
1996	ETSA's four subsidiaries come into existence
	Government announces move to privatise ETSA
1999	Members of State Parliament opposition cross the floor to allow the privatisation of ETSA by leasing its assets

## 5.1 Changes in the Public Sector

As the public sector was chosen as the setting for this study it is useful to consider the main developments in the public sector over this period. It is important to note that electricity generation and distribution is internationally often a private sector function, but in Australia it has been part of the public sector. During the study period the government of Victoria corporatised its electricity utility into eight state owned companies and then proceeded to sell the major generation assets, the first Australian government to move electricity provision out of the public sector (Alford and O'Neill, 1994). The New South Wales Labor government has been through a debate about privatisation, and it was a key issue in the 1999 state election but no action has been taken. Even where governments were towards the left side of politics and could not accept privatisation, there has still been an expectation that

there would be enormous change, in line with the general changes in the public sector which are sketched below.

Frederickson (1996) identifies two streams of thought in public sector reform – the new public management and “reinventing government”. The new public management picked up the moves from efficiency and effectiveness to outcomes and social equity. It was based on improving public sector management and policy development. The re-inventing government movement (Osborne and Gaebler, 1992) was very much based in the United States but its philosophy was implicit in other countries’ public sector change programmes. It saw bureaucracy as bankrupt and that customer empowerment, innovation, and entrepreneurship should replace past public service approaches. In particular the re-inventing government idea suggested that government’s role was to concentrate on “steering” (policy development) and leave the “rowing” (policy implementation) to others. A similar concept is manifest in the purchaser-provider split where it is perceived that there is no need for government to be a provider.

The major changes implicit in the “new public management” are<sup>9</sup>:

- “Management is a separate and distinct organizational function” (Pollitt, 1993, p.2) and management rather than policy should be the focus (Dixon, Kouzmin and Korac-Kakabadse, 1998)
- the transporting of private sector management methods into the public sector.
- the active role of managers rather than a passive supporting role, with responsibilities and accountabilities.

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<sup>9</sup> adapted from Morley, 1999, pp.36-37.

- the break-up of government monopolies and sole government service delivery with the split of purchaser and provider; resulting in contracting out. This supposedly leads to more efficient service delivery.
- an increased focus on outcomes rather than outputs or inputs.
- more flexible human resource approaches with performance based pay rather than fixed packages
- the application of user-pays principles.

The thrust of this writing has been for the public sector to take on private sector attributes. Pollitt (1993) recognises that the public sector has been quite different to the private sector in that it has placed emphasis on citizenship rather than consumerism, public need rather than supply and demand, externalities, equity of need rather than of the market, and the limited use of competition. Consumer goods do not exist in the same way, as public sector goods are sometimes compulsorily supplied (Pollitt, 1993).

Dixon, Kouzmin and Korac-Kakabadse (1998) argue that there are good reasons why private sector decision-making is difficult to replicate in the public sector including the dispersion of authority in the public sector as it accommodates the pressure from pluralistic stakeholder constituencies. In addition, Dixon, Kouzmin and Korac-Kakabadse (1998) raise the issues of the lack of common goals and objectives amongst decision-makers, as well as the inability to learn from the past because of the need to be adaptable: “intentions are changed, plans become irrelevant and consistency becomes an impediment to the day-to-day management of issues, crises and problems.”

The key changes in the public sector observable by the public in South Australia have been downsizing and out-sourcing, with a perception of reduction in service delivery. The move to out-sourcing has obviously resulted in job loss and many former public servants now live on their redundancy packages. Contestability has

become important – the need to identify whether internal service provision is as efficient as external – and to outsource when the external service is superior in terms of efficiency and at least equal in effectiveness:

*“... government has traditionally been seen as a provider of services ... today government can also be about purchasing services on behalf of its clients, and it will look increasingly to buy from the most efficient supplier, whether from within the public sector or externally ... As our experience with contracting ... grows there is likely to be continued pressure to extend contestability with the public sector as a device to improve efficiency and, at the least, maintain the effectiveness and client focus of program delivery.”*

*(Beazley from the report of the Audit Act Review Committee p.25 as quoted in Funnell and Cooper, 1998, p.86).*

The problems of introducing competitive practices into the public sector are well documented (Smyth, 1997).

A further impact of the changes in public sector management has been a change in the managers' roles in this new public service organisation, which are perceived as becoming more difficult. Mintzberg (1997) labels it as 'managing on the edges' – trying to maintain a balance between politics and administration, between administration and operations and between external processes and internal processes. Glynn and Murphy (1996) see the impact on managers of a change in accountability from political accountability to management accountability, where managers are held responsible for effectiveness as well as efficiency. This has resulted in a divided loyalty where managers have to show loyalty to their minister but defend themselves against attack from a disappointed public (Funnell and Cooper, 1998).

## 5.2 ETSA's Position as an Energy Provider

The Electricity Trust of South Australia, wholly owned by the South Australian Government, was the monopoly supplier of electricity to South Australia from 1946 until 1996<sup>10</sup>. ETSA was formed when a conservative South Australian government, headed by Sir Thomas Playford, uncharacteristically nationalised the local electricity company, Adelaide Electric Supply Company (AESCo). Playford's goals included broadening the availability of electricity throughout the large geographical region of South Australia, and securing stable cheap supplies of electricity by mining low grade Leigh Creek coal, therefore avoiding the uncertainty of using coal supplies from New South Wales (Cockburn, 1991). Some evidence of his achievements can be seen in the spread of availability of electricity throughout South Australia (Linn, 1996; Cockburn, 1991), and the success of South Australia in avoiding lack of electricity during the 1949 New South Wales coal strike (Linn, 1996; Cockburn, 1991). Playford saw the availability of a cheap stable electricity supply as essential to his goals of expanding the industrial base of South Australia (Cockburn, 1991).

The issues of efficiency and good management were raised from the inception of the organisation. The Royal Commission on the Adelaide Electric Supply Company of 1946, which was used to justify the nationalisation, found that (cited Linn, 1996, p.67):

- “The management has been efficient and economical. ...
- The prices charged by the company are not, generally speaking, excessive compared with those in other states...”.

The issue of efficiency was subsequently reported on many times in ETSA's history. Rather than concentrating on efficiency, ETSA embarked on a major period of expansion which lasted 30 years. During this period, service delivery was more

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<sup>10</sup> This has been common in the Australian electricity industry (King, and Maddock, 1996).

critical than cost. The engineering dominated management enjoyed the concentration on capital works and infrastructure development.

The shift to concentrating on efficiency was an international trend, particularly in Western nations. In the 1980s, conservative Western world governments (especially those of Thatcher and Reagan) commenced a strong focus on the reduction of the size of government and the need to improve the efficiency of public enterprises. In Britain there was a large-scale privatisation of public sector infrastructure authorities, especially water. These encouraged a focus on the potential to privatise or commercialise a range of government owned service providers, especially those enterprises with minimal levels of community service obligations. In Australia, there was a push to micro-economic reform involving the Council of Australian Governments (COAG), an alliance between the Commonwealth and State Governments (King and Maddock, 1996). Throughout the 1980s there were moves to improve various aspects of Australian infrastructure.

In 1988 the Commonwealth government report Energy 2000 (1988) identified the need for improvements in efficiency:

*“In general, energy supply industries need to cut their production costs, raise productivity and become more efficient as business operations.” (Department of Primary Industries and Energy, 1988, p.1.13).*

This call for efficiency led to a series of recommendations relating to the improving the efficiency of the electricity supply industry, including:

- *“improved financial management techniques*
- *improved load management*
- *more efficient utilisation of existing systems*
- *increased inter-connection of state grids where economic; and*

- *improved planning methods for an uncertain future*” (Department of Primary Industries and Energy, 1988, p.11.8).

This report provided hints of the dramatic changes that would take place in the industry in the ensuing years. The report commented on the approaches used in the past to monitor efficiency, which were based on a technical orientation in a time of expansion of the market. It recommended that the future approach to improving financial management should include the increased use of performance indicators such as the rate of return. The use of performance targets “to reduce costs and improve efficiency is ... very important” (Department of Primary Industries and Energy, 1988, p.11.8).

On 30th March 1990, South Australia was connected to the National Grid which included, at that stage, the electricity supply organisations of New South Wales and Victoria. This provided a mechanism by which inefficient generators would see their role diminished. Of all of the electricity authorities, ETSA had the most to lose as it continued to generate electricity from low grade Leigh Creek coal.

The next major report at a national level was the 1991 three-volume report of the Industry Commission, “Energy Generation and Distribution”. The report of this far-reaching inquiry into electricity and gas supplies commenced by commenting on the lack of efficiency in the electricity and gas sectors. The major role of the research report was to “identify policies that will promote efficiency...” (Industry Commission, 1991, Vol.2, p.1). The South Australian government in its submission endorsed this point (Industry Commission, 1991, Vol.2, p.31). The report focused on the need for the commercialisation of the government entities. It argued that they should not be subject to public sector regulations or restrictions, and should not have to meet Community Service Obligations. The report further advocated rate of return reporting, which it argued would lead to dropping projects with uneconomic returns, especially capital intensive projects. In particular, it urged the use of out-sourcing which was assumed to be more efficient. This was in contrast to the traditional

model of a vertically integrated electricity supplier producing nearly all its own services.

In 1993 the Hilmer report on National Competition Policy was released. This was to be the basis of reforms to many industries, including government trading enterprises such as those involved in electricity generation. The report made recommendations concerning the operation of State government owned monopolies and the need to increase competition in the interests of increasing efficiency and therefore improving Australia's economic growth.

Subsequently the South Australian Government came under intense pressure to break up ETSA even more. In 1996, the Industry Commission responded to a request from the South Australian Minister for Infrastructure for suggestions about a future structure for ETSA. The result was its report "The Electricity Industry in South Australia", which concluded that ETSA Corporation should be broken up. It argued that ETSA Generation and ETSA Energy should be merged into a new entity, and the system planning and control group transferred out as part of a new national group. The Industry Commission also argued that there should be more competition for ETSA Generation and that there needed to be at least two distributors of power to increase competition.

In part the Industry Commission based its argument on the relative performance of ETSA with interstate electricity providers, as measured by its labour productivity, in terms of megawatt per employee, which was as follows:

**Table 5.2 Relative Performance of ETSA (Industry Commission, 1996, p.51)**

	ETSA	Average performance	Best performing of NSW, Qld, SA, Vic
Generation	13	14	19
Transmission	48	54	77
Distribution	393	343	393

Although the performance of ETSA appears competitive, the report also compared their performance with world best practice. The data for this study was so old (1989-91) that it is difficult to understand why the Industry Commission should use it in 1996. Over the period 1989 to 1991, generation was only 67% as efficient as international best practice. This reflected the low quality of Leigh Creek coal. Transmission was 92% efficient as compared to international best practice. Distribution was “87% efficient compared to best practice utilities operating low density distribution systems” (Industry Commission, 1996, p.50), although the level of density used for this comparison may not be all that similar to South Australia. However since then ETSA has increased its productivity enormously. Despite the economic arguments against breaking down a vertically integrated electricity supplier (King and Maddock, 1996; Kaserman and Mayo, 1991 as cited by King and Maddock, 1996), the Industry Commission continued to advocate this direction.

ETSA Corporation (ETSA) was established on 1 July 1995 pursuant to the provisions of the Electricity Corporations Act 1994. Subsequently four subsidiary corporations were established: ETSA Power Corporation; ETSA Transmission Corporation; ETSA Energy Corporation and ETSA Generation Corporation. ETSA, as the holding corporation, retained ultimate decision making control over the operations of these subsidiaries, which, while established in a legal form, did not become operational until 1 July 1996.

Devolution of control from 30 June 1997, brought “independence” to these companies with each corporation having its own board, charter and performance statement. Further changes to ETSA’s organisational structure and charter occurred from 1 January 1997, following the enactment of the Electricity Corporations (Generation Corporation) Amendment Act 1996. The generation division was split off as a separate company, SA Generation, trading as Optima Energy, in separate premises with a separate board. Interstate suppliers were able to compete by 1998 for the larger customers. The South Australian Auditor General suggested that the “Impetus for the changes in the structure of the ETSA Group arose from

developments surrounding the establishment of a National Electricity Market (NEM), which requires the State's electricity functions to be structured consistent with national competition principles". (<http://www.audit.sa.gov.au/96-97/b1/etsacorp.html>, accessed 15th June 1999).

### **5.3 Pressures within South Australia**

Changes in ETSA started with the appointment of Robin Marrett as CEO, well before the intense pressures of the 1990s. Five particular pressures have been identified that led to change in ETSA in the 1980s (Patrickson, 1995):

- A slowdown in economic activity with cost pressures led to tighter evaluation of increases in capacity.
- Increases in both the real and relative cost of production led to careful evaluation against the costs of other fuels.
- Public anger at the role of ETSA in the 1983 'Ash Wednesday' bush-fire.
- Increased government scrutiny (which led to ETSA being brought under direct ministerial control in 1987 by changes to the ETSA Act).
- The use of the interstate connecting link meant that shortages could be made up from interstate.

All of these forces, large enough to provoke substantial changes in the 1980s, were added to in the 1990s by the problems of the State Bank. In early 1991 South Australia received both a psychological and economic set back when losses of approximately \$2.3 billion dollars (which later was estimated at \$3.2 billion) were announced from the State Bank of South Australia. The bank, which was government guaranteed, had invested heavily in property and lent to highly geared companies in Australia and overseas. The high interest regime of the late 1980s brought rapid asset price inflation to an end, and the Bank was left holding many overvalued assets owned by illiquid developers. The financial problems of the State

Government Insurance Commission, the State Bank of South Australia and its subsidiary Beneficial Finance created such public opprobrium that the Premier, John Bannon, resigned and the Labor government was defeated in the next State government election. Debate ensued about the role a government and its trading enterprises should play in economic and social development. Scott (in Parkin and Patience, 1992) concluded: “the lesson is that organisations should have clean and uncomplicated mandates, while social objectives should be approached through direct and open government action”. (Scott, in Parkin and Patience, 1992, p.92).

The newly elected conservative South Australian government engaged in asset sell-offs and tight fiscal constraint to reduce the resultant debt. They were also faced with an economy in recession, with the associated problems of reduced taxation revenues and reduced activity and employment. Given its conservative bent, the government was enthusiastic about smaller government and, using the State debt as a rationale, began a process of privatisation and out-sourcing. Two major steps were the handing over the running of the State’s water and sewerage services to an Anglo-French consortium United Water, and the out-sourcing of almost its entire information technology to the U.S. company EDS.

Despite discussion of the privatisation of ETSA, this was not attempted until 1998. What did occur was the out-sourcing of its services wherever possible. The Liberal Government, on coming to power, set up a Commission of Audit, which in Chapter 15 addressed the specific issues relating to ETSA (Commission of Audit, 1994). The report noted that ETSA had already shed 27% of its workforce or 1,585 people (ibid, p.263) and increased its labour productivity from 1.31 to 1.99 gigawatt hours per employee. The report highlighted known issues in relation to the cost of generation using Leigh Creek coal. It recommended (ibid, p.283) the corporatisation of ETSA, the development of a more commercial approach by each business unit having its own profit and loss, and that the increased use of contractors and out-sourcing. This report set the pattern for the subsequent changes to the organisation.

The combination of the Hilmer report and the South Australian circumstances resulted in a climate of privatisation of government assets, a period of continuous calls for increases in efficiency by all government service providers, and reduction in services. The days of growth were over, and ETSA as a vertically integrated provider was finished. The stage was set for dramatic changes to the structure and culture of ETSA.

## 5.4 The Culture of ETSA

### 5.4.1 Defining Culture

The concept of organisational culture has been subjected to a variety of meanings. Schein, who is one of the few writers who has “articulated a conceptual framework for analyzing and intervening in the culture of organizations” (Hatch, 1993 p.657) defined culture as:

*“the pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems or external adaptation and internal integration, and that have worked well enough to be considered valid, and therefore to be taught to new members as the correct way to perceive, think and feel in relation to these problems” (Schein, 1985 p. 9).*

Despite the claim that organisations do not have a culture (Smircich, 1983), it may be that culture can contribute to organisational effectiveness by encouraging:

- a sense of purpose or direction
- a shared set of meanings
- a sense of ownership which reduces the need for alternative organisational controls. (see Sinclair,1991).

Sinclair (1991) identifies four models of culture:

**1. The cultural control model** - This model developed mainly by American and Japanese writers (Peters and Waterman, 1983; Ouchi, 1981) argues that a strong culture is the vital cohesive force that propels strong organisational performance. The key aspect of this model is the belief that culture can be imposed by senior management on the organisation. The problems with this model include its failure to recognise the usefulness of tension (Pascale, 1990) and the unacceptability in many organisations of the imposition of management's view. The writers in this school of cultural thought overstate the possible level of organisational coherence (Hofstede et al, 1990).

**2. The sub-cultural model** – Rather than seeing an organisation as a homogenous universal culture, this model portrays the organisation as constructed of a series of sub-cultures. These may exist on professional, divisional, geographical and union affiliation bases. It is argued that recognition of sub-cultures allows greater flexibility of the organisation (Sinclair, 1991) and is essential for innovation (Kanter, 1988). Although it is argued that sub-cultures should not be controlled, there needs to be some effort to encourage counter-cultures to harmonise with organisational values (Martin and Siehl, 1983).

**3. The professional-managerial multi-culture** – This model is based on the premise that professionals do not usually want to be managed. They have a commitment to professional values and seek quality of service above cost-effectiveness or efficiency (Sinclair, 1991). This almost inevitably leads to some conflict with managers, particularly as efficiency has become more important in many professionally based organisations. However, tensions between professionalism and managerialism need to be managed constructively.

**4. Public interest or public service cultures** - This view is similar to the cultural control model, but modified for the public service. In the public sector different

aspects of culture are emphasised. It is argued that a public service culture will be built on the existing values of employees more than the top-down cultural imposition of the cultural control model (Sinclair, 1991).

All four models may be useful for exploring the culture of organisations, as potentially aspects of all four models could exist in an organisation like ETSA.

#### **5.4.2 Concepts of Culture as Applied to ETSA**

Public sector organisations have distinguishing features of their culture. ETSA prided itself on its independence from the public sector and that employees did not see themselves as public servants (Linn, 1996). As ETSA was commercialised and finally moved towards privatisation, the question remains whether it was ever a “true” public sector organisation. Table 4.3 lists the features of public sector organisations based on Sinclair (1989). Columns one and two are from Sinclair (1989), column 3 is a summary of how ETSA matched these features at the start of the research in late 1993. I have based this matching on the prior research of Birkett (1992) and Patrickson (1995), coupled with the work of Linn (1996) and insights from my interviews with employees.

**Table 5.3 Distinguishing features of Public Sector Organisations**

Features	Detailed features	Specific issues relating to ETSA
Multiplicity and ambiguity of goals	Greater tendency for goals to conflict Trade-offs using non-equivalent criteria Instability and short time horizons	No evidence of overall goal conflict. Historically the organisation had a commitment to staff training and employment at the probable expense of efficiency.
Multiple access /multiple managers / multiple decision-makers	Fragmented authority and decision-making Public accountability and scrutiny through parliament and media Multiple internal stakeholder groups and domains	Public accountability and scrutiny are strong both in parliament, parliamentary committees and the media. Internal decision-making did appear to be fragmented.
The insufficiency of efficiency as an organisational goal	Ensuring equity Qualitative performance measures, distance from market measures, difficult to define bottom-line Suspended between economic and political value systems	In ETSA there are social objectives relating to the pricing and supply of electricity to: <ul style="list-style-type: none"> <li>● rural areas</li> <li>● aged and disadvantaged members of the community</li> </ul>
Bureaucratic culture	Centralised decision-making Legal and other constraints => cautiousness and low risk-taking Neutrality and ill defined performance measures Legislative and structural impediments to management initiatives	ETSA faced legislative constraints which created the need for bureaucratic processes to meet them. Decision-making was often centralised.

The overall conclusion of this table is that ETSA did belong to the public sector. Some specific features of ETSA which tie in with a public sector culture are:

- Community service obligations:

- to supply power to rural communities even when it was uneconomic to do so
  - to price electricity to meet social objectives
- Public accountability – ETSA, as a public organisation, has been subjected to considerable public scrutiny.
  - Parliamentary accountability - The ETSA Act of 1985 brought ETSA under ministerial control for the first time. ETSA became a topic of parliamentary and parliamentary committee questions. Questions related to issues from its strategic direction and ownership to the use of credit cards. In early 1997 particular focus was directed to the inability of the power system to cope with “heat wave” conditions and whether this was due to the decrease in ETSA’s staffing.

The actions in 1980s and 1990s to bring about change in ETSA were partially about reducing this public sector role of the organisation and to position it as a publicly owned company. The use by SA Generation of the trading name Optima Energy increased the appearance of a separate private organisation, not subject to public sector rules or direct parliamentary control.

In assessing ETSA’s culture against Sinclair’s (1991) model, the following issues emerge:

1. Cultural control model - The ETSA case study shows a change in culture over a period of time. However it was not clear that this was the result of imposition of culture from above, as this model would imply. To some extent General Managers did have some power to change culture, and the appointments of new General Managers with their own management styles did mark significant points in the organisation’s history (Linn, 1996). The

appointment of Robin Marrett marked a distinctive change, being the first outside appointment. Marrett who had come from a successful twenty-five year career in a single profit-making organisation - Mobil Oil Company. He brought with him a desire to change the public sector culture, break down the manager-union affiliation, and create management accountability. The appointment of Clive Armour as the next General Manager was seen as a return to a utility bureaucracy, which reflected Armour's background.

2. The sub-cultural model based on professional, divisional, geographical and union affiliation bases does explain some of the aspects of culture in ETSA. An organisation with so many depots and branches across South Australia engendered allegiances to specific locations - local social club branches, being one example. The subsequent closure of so many branches broke some of this affiliation. The Head Office of ETSA, Number 1 Anzac Highway, was perceived by staff to be a unique entity; "Number 1" became a term for senior management. Affiliations based on professional bases were important. The most powerful professional allegiance was between engineers - and the organisation was said to be "an Engineer's enterprise" (Linn, 1996, p.73).
3. The professional-managerial multi-culture – Subsequently it will be shown this model is particularly pertinent to ETSA with its strong professional management by engineers. As the pressure increased to move away from professional excellence, there was increasing tension in the professional-managerial relationship. Engineers realised that financial performance was important but were disappointed when the quality of service delivery was compromised.
4. Public interest or public service cultures - Rather than building on existing views of employees the history of ETSA shows phases of significant cultural change when management specifically tried to break down the existing values of employees.

Each of these models, with perhaps the exception of the last, contributes to the understanding of culture in ETSA.

It is also argued that high performing government utilities place more value on horizontal interdependence, top management contact, perceived fair and competitive remuneration, and opportunities for employee development than their private sector counterparts (Gordon, 1985). Both the evidence of Linn (1996) and my interviews suggested that these characteristics did exist but over time they were broken down. Horizontal inter-dependence, which had been very prominent through the “network”, was broken down. Perceived fair and competitive remuneration had been very important in ETSA. There was still much effort going into preserving this during the period of this study. So ETSA was moving away from a more traditional public sector utility to be more like a private sector provider.

### **5.4.3 The “Old Culture” of ETSA**

The concept of an “old” culture was raised during the interviews, and is found in academic research of ETSA (Birkett, 1992; Patrickson, 1995) and the organisational history written for the staff and the broader public (Linn, 1996). The single largest move to change culture is identified with the appointment of Robin Marrett as General Manager in 1988 (Patrickson, 1995), with impacts being felt across the organisation from the start of 1990 (Patrickson, 1995). It is important to define the nature of the pre-existing organisational culture, so that impacts of subsequent interventions can be tracked against this. No attempt to measure organisational cultural constructs has been made. The following sources of data were used to establish the culture, which existed up to the end the 1980s:

- published and unpublished material by academic researchers (Birkett,1992; Patrickson, 1995; Macintosh, 1995). In each case a discussion was held with each author to clarify issues raised in the written material.

- the official major history of the organisation (Linn, 1994). This book was published by the organisation based on an oral history. It is used as confirmatory only, as it does not set out to define culture, but does produce material which elaborates on these issues. It was also commissioned by ETSA so the author would have been conscious of showing care in the selection of material and the interpretation thereof.
- the interview transcripts from this research. Although these views were taken from just one area in the organisation, many of those interviewed had worked in other areas of the organisation for extended periods. The sub-cultural model (Sinclair, 1991) suggests there may not be a homogenous culture and the use of the interview data is important to balance the other research with confirmatory evidence and with emphases unique to the Department.

The following concepts of the 'old' culture were identified:

1. **an engineering / technocratic organisation.** The organisation had traditionally been managed by engineers, was organised along technical dimensions and sought technical solutions to its problems (Birkett, 1992). "The managers of the industry are mostly engineers who bring a practical but not necessarily a cost-efficient or financial approach to the industry." (Rosenthal and Russ, 1988, p.34). Of the changes that occurred in 1984, Linn (1996, p.203) observed "the old structure with its dominance by engineering, had been in place for so many years that it could not be whittled down overnight". Two interviewees specifically reflected on a previous dominance of engineering (although many raised the related issue of the increasing importance of financial performance). The first commented "ETSA traditionally was a technically-driven organisation. Technical excellence was probably the prime mover". The second bemoaned a perceived change:

*“I’ve seen the engineering go out of ETSA. It really was an engineering organisation when we were building power stations and transmission lines and substations and buildings and other infrastructure. We were run by engineering managers, it was an engineering group, money was available”.*

2. The second concept was that of **“the one happy family”**. Two interviewees specifically reflected on the old family feeling. One interviewee said “you were like one big happy family you all helped each other out” and another “its not the family that it used to be”. This concept of ETSA as a family was there from its inception as the following quotations indicate:

- *“during these formative years (1909) ... a strong sense of family camaraderie was developing” (Linn, 1996, p.31).*
- *“he (Clifford Patching) believed that a sense of ‘family’ was built up during the days of the Company when it was all ‘an Engineer’s enterprise’. This was at the core of the organisation’s strategy.” (Linn, 1996, p.73).*

James Nelson, a long serving employee said: “ETSA was a more efficient utility because of its self-contained family method of operating”. (Linn, 1996, p.74).

Of Wheadon, first General Manager, it was said by the next General Manager that he was remembered for “the creation of a family spirit, which must have a very high share of the credit for the smooth running of the Undertaking for so many years” (cited in Linn, 1996, p.77).

*“It was he (Lea, General Manager 1946 - 54) who had kept the ‘family’ going” (Linn, 1996, p.116).*

There were a number of factors that slowly destroyed the ‘family’ - the geographical spread, the growth of numbers (Linn, 1996), and the push for tighter

financial accountability. He suggests that the end of the 'family' concept occurred in the mid-1980s as a result of the efforts needed to bring about a stemming of the financial losses. Linn suggests that after a 1981 accident in which four workers died: "It was perhaps the beginning of employees wondering where that ETSA sense of family or team had gone" (Linn, 1996, p.196).

3. Related to the idea of the family was the concept of a **"paternalistic" approach** (Birkett, 1992). This concept suggests that the organisation cared for its employees in a way which was at times intrusive. Bosses would direct their employees to undertake particular professional development without consultation. Managers and union representatives would discuss the relative progress of employees and what could be done to advance their career prospects within the organisation.
4. Another aspect of culture was the **concept of the bottomless bag of money**. Sixty five percent of Birkett's (1992) respondents identified with the old culture of "Cost not important". In my research one interviewee expressed it as follows: "there used to be a big bucket of money out there. That's become more cost competitive and that's good I've got no argument with that". Another referred to the end of the bottomless bucket of money and how each section of the business now needed to pay its way. The old way had concentrated on spending:  
*"Well the mentality of ETSA has been no different to the rest of the public sector what you do is you put up a budget and you get your budget approved and then you set about trying to spend your budget; so the culture is always a spending culture"*.

This attitude to some extent was the result of the continuing expansion of the organisation (Linn, 1996), which had led to the organisation becoming "fairly fat" (Philip). Some of the staff commented about the way the organisation became set in a spending culture including:

- *“Up until a few years ago we've really just been building power stations, transmission lines. We've been on a fairly big programme of building our infrastructure and money wasn't an issue. There was plenty of money, if you needed to do it, the money was available. Things have changed, there is no money available and we are not building a lot of lines...”*
- *“before you just kept on adding 10% every year. And that's the way ETSA worked. That's how it did for years and years until the crunch came”.*
- *“We used to build into it all sorts of things and our actual expenditure would be often 25% below what we budgeted for especially in the capital area years ago. Because everybody thought, I'll buy this, I'll buy that, I need this and when you aggregate it all up it just can't be done, didn't have enough people to do the engineering”.*

There was a feeling expressed that although their division had adjusted to this change, the zones were still living in the past: *“I think they're still feeling it as they've got to open a cheque book and they can pretty well do what they want and they don't need to look at the return to the business...”*

5. **“Tell me what to do and I'll do it”** - in the past the organisation had relied upon hierarchical control and workers had become accustomed to doing what they were told. In fact branch managers and supervisors spoke of their concern that this culture really still existed. The most common metaphor for this attitude was “leaving your brains at the gate”. As one manager put it:

*“I mean in old ETSA the directions came down from the top and people were virtually told by the manager or their boss what to do and they were very comfortable. They didn't have to make the decisions - they were happy to criticise what was said. They went away and did*

*their job, tell me what to do and I'll do it. And they did it very well, extremely well."*

The impact of programmes like best practice was to see:

*"...people contributing, bringing their brains to work and not leaving them at the gate when they come in. Our structure and mode of working forever up until recently has been just that. It was quite easy to come to work and to only bring only part of your brain with you and sit there and be told each day what you had to do and you do it and you go home and then start using your brain. We're trying to change all that by getting people involved and contributing".*

This increased importance on each employee contributing was also a product of the rapidly diminishing workforce.

6. **Patriarchal** - this is an aspect of culture identified by Birkett (1992). ETSA as a whole and the Department were male dominated. The only female staff member in the management group of the Department was the human resources manager. In the next level down there was only one female - an accountant. The dominance of males within ETSA is not surprising considering the historic dominance of male graduates from both university engineering and technical college courses.

These aspects of the 'old' culture need to be identified to anchor the identification and explanation of the subsequent changes and the role of ABC in those changes.

## 5.5 The Response of ETSA to External Pressures

With significant changes occurring nationally and in South Australia, ETSA responded to the external pressures. Linn titles his chapter on ETSA's history between 1962 and 68 as "Reorganising in a World of Change" (Linn, 1996). However the reorganisations of the 1960s were primarily to improve the effectiveness with which continuing expansion could be handled. In particular there was a split between operational and engineering control and also there was the formation of the regional groups to create "*single point accountability*" (Linn, 1996, p.146). In 1984 consultants were brought in to bring about reform, especially to start the change from an engineering culture to a management culture.

Pressure was building in the late 1980s for a significant change to the organisation. The change accelerated with the appointment of Robin Marrett hired for his broader managerial expertise (Linn, 1996) to push a more management than engineering perspective. "*At the core of Robin Marrett's approach was the sense of convincing ETSA's staff to move from its engineering-based, bureaucratic structure to a business approach*" (Linn, 1996, p.217).

In 1992 Scott observed that "*unfavourable analyses of staffing levels and charges in the late 1980s has caused ETSA to adopt a more aggressively efficient stance*" (Scott in Parkin and Patience, 1992, p.85). This was about the time of a major restructuring called "micro restructuring". This initiative resulted in removing some of the fat that Marrett perceived in the organisation but was done on a consultative basis.

One of the cultural change initiatives launched in the Marrett era was BRAT - Blue Ribbon, a series of training courses. Its focus was on serving the customer, whether it is an internal or external customer. Another innovative training course was the Focus course, where an external management facilitator led teams in managing a

supposed company. Marrett guaranteed that all ideas generated would be implemented. These initiatives led to some change in culture and attitudes but some staff believed that the task of changing the organisational culture was larger than even Marrett expected.

The most obvious change in the organisation was the substantial reduction in staff numbers. This started during Marrett's time as General Manager (1988 - 93) and continued during the period of the Acting General Manager after him (1993 to 1994), and then through Armour's period as General Manager and then Managing Director (from 1994). Table 5.4 below shows the staff numbers and productivity at intervals. It is important to note that these increases in labour productivity in the 1990s were achieved with reductions in working capital and a marked reduction in the level of fixed assets available to employees. Buildings and equipment was sold from 1991 to 1995.

**Table 5.4 Productivity of ETSA**

	'82	'85	'87	'90	'91	'95
Employees	5354	5571	5965	5696	5186	2768
Output (GWh)	6244	6737	6892	8030	8186	9000
Productivity	1.17	1.21	1.15	1.41	1.58	3.25

Staff spoke at length about the drastic reductions. Some were delighted to take packages. These were people who were either near retirement, disenchanted and/or sure that they could find another job. For others it was a period of concern because they had no other job to go to. A major problem of voluntary packages was that people with many years of accumulated knowledge and excellent skills left the organisation. In the earliest periods this was problematic, as there were not other organisations locally that could provide equivalent services.

It gave ETSA the opportunity to encourage two groups to go:

1. those employees who were not willing to accept change and who would be obstacles to future directions
2. older workers whose capacity for heavier work was diminished and who in the future would be a drain on resources.

As each wave of staff reductions swept over ETSA, the realisation grew that change was irreversible and substantial. Each wave of staff reductions produced a re-organisation of the Department to help the remaining employees cope with the workload. One significant problem was that each round of staff reductions and reorganisation was declared to be the last. For example: *“All staff were notified well in advance that voluntary separation packages would cease at the end of 1992, and this resulted in a spate of early retirements...”* (Patrickson, 1995, p.82).

A significant problem here was the prevailing feeling of uncertainty that permeated the organisation, particularly through 1993:

*“I don’t think anyone really knows. We haven’t got a general manager that’s not acting. We don’t have a proper director, we’ve got one that’s acting. We’ve probably got a Minister that we’re waiting for direction, I think there’s meant to be some investigation into ETSA and the way we operate and our structure and I don’t believe that will be ready until September this year so it means nothing is going to happen too soon”.*

A major change that was promoted but eventually was dropped was the merger with the major water and sewerage authority the Engineering and Water Supply. It was conceived in the latter days of the State Labor government, and announced on 23 April 1993. However, this proposal was short-lived. One interviewee listed it as the biggest disappointment in the preceding year - disappointing inasmuch as the disruption and concern it caused the workforce - a further destabilising event in the circumstances of continuing change.

The election of the Liberal (conservative) government in 1993 brought with it a number of changes. In the first instance the merger lapsed. More fundamental was the more pro-business attitude of the incoming government and a strong commitment to out-sourcing. This was happening internationally (King and Maddock, 1996) and nationally (Coulter, 1995; Paddon and Thanki, 1995). However the South Australian government, took the use of out-sourcing on to create a new approach to the management of public sector agencies and departments. Some ETSA interviewees saw it more cynically as a means of paying off the business sector for its support of the Liberal Party in the election.

The next major change was the impact of the appointment in October 1994 of Clive Armour formerly of the South Australian Gas Company, ETSA's long standing rival in the energy field. He was there to administer the end of the Trust and create the new ETSA Corporation with its four new subsidiaries. As Clive Armour was reported as saying: "(another) round of restructuring (had) imposed on ETSA's employees no small amount of disruption" (cited by Linn, 1996, p.233).

Armour brought about more changes to the organisation but it was perceived by many that he was taking the organisation to a more traditional public sector approach to management. The previous approach had been to create accountability by having a profit and loss statement for each segment of the business. Armour believed that the transfer pricing system was counterproductive and that there were better ways of managing the business. Armour brought with him another SAGASCO manager to head up the Department. This manager, who came from a background in economics and accounting, had held a staff position in SAGASCO and was perceived as a poor choice, by most senior members of the Department, to fill a line position in an engineering organisation.

## **5.6 Changes in "the Department"**

I have outlined changes within ETSA in this chapter and some of the changes to the Department in Chapter 1. In addition to the major impact of the downsizing, several

other major changes occurred in the Department during the period of the study from early 1994 to early 1997.

First, there were restructurings of the Department with each wave of staff reductions. These generally consolidated the depleted staff into functional groups - for example, construction and maintenance of a particular type of facility were merged. Whereas accounting and some other staff functions had been decentralised across the Division, they were effectively re-centralised.

Secondly, the Departmental manager was replaced in early 1995. Some staff believed that the reason for this was not superior managerial or technical competence of the new appointee but that the previous manager would have resisted the changes of the new management. At one extreme it was expressed that the new manager was hired specifically to destroy the Department. Some staff reacted negatively to the appointment of the new manager, with open hostility being seen at one large team meeting.

Thirdly, there were a number of functions which were dropped from the Department. They were either transferred to other agencies, where regulatory functions could be centralised, or were out-sourced. Stores of parts and materials virtually disappeared and with them the accompanying stores functions. Licensing of electricians was transferred to another government agency.

Fourthly, the presence of a new General Manager for ETSA as a whole brought about rapid changes to the structure and direction of accountability. Under the leadership of Robin Marrett the organisation had been moving to local accountabilities where each section would sell its services at the lower of cost or market and aim to make a profit. This business unit system was starting to develop when the new General Manager, Clive Armour, abandoned the business unit structure and moved back towards actual expenditure against budget as the only form of accountability. An initial interview with the incoming Departmental

manager showed that he had not really developed any concept of how accountabilities could be established with the abandonment of the business unit system.

## 5.7 Summary

In conclusion, there were major forces influencing ETSA in the late 1980s and 1990s. The organisation had developed in a period of major growth for public services. In the 1950s and 60s it was rapidly expanding its coverage of the geographical areas of South Australia. It was also expanding to meet the increased needs of a growing population in South Australia. By the late 1980s this growth had slowed. International and national forces for change were impacting on the Australian situation. The passion for expansion of the service capabilities of infrastructure was giving way to a new regime of small government and accountability.

A series of reports commenced to focus on the efficiency of the delivery of electricity. Compounding this move was a dramatic change in the political and economic climate in South Australia. The impact of these developments was even greater job losses and restructuring. It was at this point the manager of the Department brought in consultants to engage in the development of a system that would provide the basis for “structured and rigorous decisions” (Consultants Brief, 1991) that is, ABC.

However it will be argued in the following chapters that accounting was not able to stop the major changes or to make them more ‘rational’. Two roles are explored for the ABC project:

- it was implemented by Departmental management to defend the organisation from the forces of change, and even if the organisation crumbled to preserve the jobs of its staff. This was a defensive role for accounting. From this

perspective it was a failure, it was unable to stop the forces of change; “ ... change would sweep all before it...” (Linn, 1996, p.219).

- it was used to promote the transformation of the attitudes of the employees and the business processes within the Department. The aim was to make managers and “shop floor” employees appreciate the need for cost efficiency and optimum utilisation of assets and employees. There is some evidence that this occurred to some extent but not as really anticipated by the managers and supervisors within the group. Patrickson argues that by the end of 1992 “Whatever might happen from then on, the old outlook had gone forever, and the new culture was rapidly emerging and needed to be firmly embedded within the following months” (Patrickson, 1995, p.82). The evidence of this research was that despite all the changes some of the “old outlook” was deeply entrenched.

The next chapter outlines the history of the implementation of the ABC system - its implementation, its use and its demise.

## **6 The development and history of the activity based costing system**

Accounting and management systems can be shaped by the organisational context (Nahapiet, 1988). In this chapter I describe the history of the development of ABC, exploring the reasons for its failure. I demonstrate that circumstances external to the Department, and specifically power relationships in the organisation moulded the ABC system. This goes far beyond a contingency explanation of management accounting systems. While a contingency approach might explain how a management accounting system might reflect the external environment, it is unable to demonstrate the dynamics of system changes (Otley, 1980; Moores and Chenhall, 1994; Puxty, 1993). Contingency theory explanations usually take into account a limited range of variables, and because the approach is based on quantification, many variables have to be ignored or reduced to a few “reified variables” (Puxty, 1993), ignoring issues like organisational power. It has also been argued that interaction with the environment is a two-way loop, that organisations react to the environment and that organisations create the environment (Preston, 1991).

### **6.1 The Existing Financial Management Control Systems**

Before the development of ABC there were a range of more traditional management control systems within ETSA. Particular attention is directed here to the systems that existed within the Department. There is evidence in the interviews that increasing stress was being placed on these other forms of management control. I provide this evidence in the sections below for each form of management control. So ABC was not being developed in isolation but as part of a process of increased accountability for managers and supervisors.

### 6.1.1 Budgeting

Historically the budgeting system had been perceived as unimportant. One of the common metaphors, as stated in Chapter 5, was the “bottomless bucket of money”; budgets and financial control were not important measures of managerial control. Bob, a supervisor of a work team said “... *its something relatively new for us, we've only got involved in it (budgeting) in the last 3 years probably*”. Other interviewees commented on the increased importance of the budget, and the development they had needed to make to understand budgets. One manager observed:

*“In fact it wasn't until I suppose 6 years ago that we actually treated the budget as any more than a guide. ...a budget (was set) so that we had some idea of how much money we might need in a capital bid ... and for setting the tariffs for the next financial year. But when Robin Marrett came in ... he said he thought that the whole thing was very very inadequate and he said 'I want the budgets to be regarded as the working document for the business'. Certain rules were changed. ... he began to put in some measures which began to indicate that we'd better start thinking about our budget more seriously”.*

Again the Marrett era was signalled as a point of change in management thinking.

The following changes were occurring in the budgeting area:

1. more top-down direction. Instead of bottom-up requests and then subsequent pruning there was clear direction as to the level of budget cuts. One manager in the Department expressed it as follows:

*“This year ETSA is already saying our budget is going to be so many million dollars below what the budget was last year and we've already had meetings at the top level without service providers and with corporate and others and at the top level. We're saying this is the*

*amount of money that we're going to be cutting off of our operating expenditure for the various components of ETSA and that's coming down to us. And we're now being told the sort of cuts and the sort of shape of what the budget is going to be and ... we'll be going back to the branches and saying you've got to come up with strategies and plans to reduce your expenditure by this amount next year... ”.*

2. The budget process was becoming a 'true' planning process whereas before it was an indication of how much money branches would like to spend. As a result of that:

*“...actual expenditure would be often 25% below what we budgeted for especially in the capital area years ago. ...So that has changed. It has become a much more important tool in the way ETSA's managing its affairs over the last few years and this year its even more serious because we've got to deliver savings in costs, increased dividend to the government next financial year. ... So we're doing it, we're using the budget process as the vehicle for the planning to get those savings” (Ted).*

3. There was much more consciousness of the budget:

*“Where we sit we've got a job to do. Who actually pays the dollars, which bean counter takes a few out and puts it in ours, we don't really care about. Our job is to get the job done on time and the most efficient way we can and within the budget estimate we originally prepared” (Harry).*

Meeting the budget was now seen as important, whereas previously re-allocations of finances had occurred to cover up shortfalls.

### 6.1.2 General Ledger and Monthly Reporting System

The organisation ran a General Ledger system for the whole business. Given the diversity of the operations this was not seen as meeting many user needs. One manager noted that: *“financial accounting was feeding information into the General Ledger so that the annual report could be prepared and that was all that it was”*. There were moves to improve the reporting. A move was later made to finally overcome this problem<sup>11</sup> by buying an enterprise resource package, SAP. The project team of approximately seventy people took six months to install this integrated financial management software.

### 6.1.3 Expenditure controls

In conjunction with the budget and monthly reports against budget was a system of expenditure control. This was increasing.

*“This organisation has got a lot of procedures in place for expenditure and if we over expend or under expend we need to address those things. Part of that problem is that you’ve got technical people that don’t really have and don’t want to have an understanding of the finances” (Harry).*

One of the most conspicuous controls was the authorisation of all credit card purchases. This issue came about because questions were raised in State parliament about the use and abuse of credit cards. Staff who commented on this were very negative. Political

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<sup>11</sup> However the problem was not overcome by SAP, implementation problems plagued its subsequent usefulness. Unpublished and embargoed work by Syme et al, University of Adelaide shows that SAP was not well implemented and in some parts of ETSA led to the scrapping of excellent computer software and the use of hand-written support records.

visibility necessitated tight controls which were against a framework of increased devolution.

ETSA was developing tighter forms of financial management control systems during the early 1990s, partially in response to the programs set up by Robin Marrett. The implementation of ABC fitted a mood where greater financial control and accountability were the trend. This was the break from an engineering culture to a more business-oriented culture. The move to greater devolution was accompanied by increased accountability and accounting made the role and performance of managers more visible. This is consistent with the views of Ogden in the water industry in the U.K.

## **6.2 Other Management Initiatives**

In addition to the developments in financial management control systems, there were a range of developments occurring in general management systems, principally in human resources.

### **6.2.1 Award Restructuring and Reclassification**

The human resources sector was gradually moving all employees into the new award structure; classifying the jobs and making job placements. The purpose of this was to simplify the pay structures and create greater flexibility in the workforce. However, this process took considerable time and some workers were without a job description for over three years, with the consequent feeling of lack of direction and belonging. They continued doing what they believed their jobs were. Further, naturally some felt disadvantaged. This included those who had been on higher duties pay and found themselves on less money. Those who had taken on greater responsibility and received no financial reward were particularly aggrieved with the process. These people were at all levels of the organisation.

### 6.2.2 Best Practice Programme

A best practice programme was entered into to promote a climate of improvement in work practices. The management view was *“a lot of money and training was spent and its up to the branches to push ahead with it if they want to. Some are really going with it and others aren't doing much about it”* (Linda). While some managers and supervisors commented on the need to implement new practices, others reflected that there was too much change and not enough time to implement the ideas. Radical change was replacing the continuous improvement concept in the best practice programme.

### 6.2.3 Strategic Planning

ETSA adopted formal strategic planning in 1990 after two years of clarification of their objectives and data gathering about their activities. There was some criticism of the approach to strategic planning. Garry noted:

*“... he [Marrett] just said that we're going to be, the mission statement was very global, that we're going to be the leading power authority by 1995 in terms of costs, safety, customer service; I think they were the key points out of it. To do that well each business unit had to take initiatives to achieve that. ... I think the global mission was right but I think the way organisation managed it was probably not the best”.*

There was devolution of the strategic planning process to the areas below the corporate area. This process became sufficiently built into the structure that the departments put effort into preparing their part of the plan. In the Department, the managers sat down each April/May to identify the key result areas for the coming year and action plans to improve those areas. Safety, employee performance, and legal compliance were three areas raised in a discussion with Ted:

*“Employee performance we’ve looked at, a lot of that is how many people we need to do a particular function, and training requirements and performance review and development programmes. Safety is taken as a key result area which has always got number 1 priority. ...Just at this moment we had a meeting this week, workshop where we decided that we would set out certain action plans, establishing a skills analysis basis for making sure that we understand what legislation applies to what we do and get policies documented and I have certain responsibilities in that area for the division.”*

The role of the Department was expected to increase as there was increasing devolution. For example, Linda said:

*“We are going to be looking at more strategic thinking and doing our own HR planning and we are going to become more responsible for everything because corporate are going to really disappear altogether. So we are going to be responsible for everything and in some ways I can’t wait ...”*

This expectation was not met as the organisation became more centralised. By 1994/95 a new corporate plan was put forward for the next five years. The strategic planning process was disrupted by the break-up of ETSA into smaller companies where the global vision was irrelevant.

The strategic planning process was another way of providing structure to managing a large organisation and bringing more control over an organisation which had been in growth mode and was now decentralised both in functions and geographical locations.

### 6.3 The Early Development of ABC

I did not commence this research until over two years after the ABC system was developed and implemented. The discussion of the implementation is therefore of necessity brief, based on analysis of internal records and discussions with staff involved. The primary focus is on the changes in the ABC system over time. A brief summary of key events in the development and use of ABC is provided in Table 6.1.

**Table 6.1 Key Points in the Development of ABC in the Department**

Nov 1991	Consultants come up with design and commence data collection.
March 1992	Report from consultants
March 1994	Acquired software and reprocessed data
October 1994	Major revision of ABC data Departure of the ABC champion
1995	Departure of the Manager
June 1995	New Manager unsure about future of ABC
Late 1995	No further effort to be put into ABC; model not up-dated
1996	Benchmarking using old ABC data

ABC was introduced into the Division of ETSA of which the Department was a part by consultants, in late 1991. The consultants were involved in change processes for the Division of ETSA and recommended to Russell, the finance manager of the Division, that they proceed with ABC. The consultants were keen to extend their stay in ETSA by moving on to the ABC study. At that point the consultants had no experience of implementing ABC but believed that it was a good approach to managing the Division.<sup>12</sup> Their knowledge of ABC came from their overseas head

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<sup>12</sup> The role of consultants in initiatives like implementations of ABC raises the issue of the role of the Big Five in broadening their role, as traditional audit and taxation work remains constant or contracts.

office and senior consultants interstate. To some extent they used ETSA as a 'guinea pig' to develop their own skills in such implementations.

Ted, the manager of the Department, accepted the concept and convinced his subordinate managers that this was one of the tools that they needed to drive the business in the right direction. He also convinced his peers, who were managing the other departments of the Division, that they also should try to use ABC in their areas. Russell believed that Ted was convincing because he was an engineer as they were, and spoke their language. It would have been difficult for a perceived "bean counter" to win the argument. However only Ted used ABC for anything more than a one-off review of operations. Although the one-off use of ABC is recognised in the literature as having economic and perhaps organisational advantages (Friedman and Lyne, 1995), greater advantages may accrue if it is bedded down in place for a longer period. It appears that these other managers were "talked into it" rather than being convinced of it themselves and this may have contributed to their lack of drive in taking it on as a long-term system.

Ted was convinced that he needed ABC to improve operations and develop the Department. His goal was to organise and manage his Department, so that if it was privatised a new owner would maintain the operation as it was. To achieve this Ted was confident that he needed a better appreciation of his cost structures. The project was called "Strategic Cost Management" – the emphasis was to be on using cost information to guide the strategic direction and decision-making.

Several senior managers within the Department remembered the importance of the consultants as a trigger to its implementation. Others spoke as if it had been an obvious selection by a rational decision process:

*"I think the reason we did it in the first place was to identify which lines of business were profitable and which ones weren't - to look at which lines of business we needed to rationalise".*

*“Well it was introduced in my opinion to give us a feel for where we are in a competitive situation and what the competitive gap might be. It gave us a feel for what our lines of business might be, and how much of effort we were putting into the lines of business.”*

An idea advocated by someone external to the organisation became rationalised by the members of the organisation as a natural development. In this case the managers had come to believe that it was their own idea. The managers’ beliefs expressed above were that ABC would help them to engage in orderly structured decision making; but this structured approach eventually was overwhelmed by seemingly irresistible forces of change.

Several reliable sources suggested that the consultants charged approximately \$300,000 for this assignment. This amount is not unrealistic considering similar rates being paid for this service in Adelaide at that time. A clear economic return for this investment was not substantiated and there was no performance outcomes set against which the project could be evaluated. Ted, in a memo, claimed that the use of consultants would provide:

- a level of resources that was not available in the Department.
- expertise which was not currently available, and the willingness to steer the project through.
- knowledge transfer for the Department to pick up the system.

In the previous chapter the background to the implementation of the ABC project was sketched. I have demonstrated in this chapter that there were a range of on-going changes to both financial management control systems and human resource practices. The climate for the introduction of ABC was therefore one of change. The ABC system was justified on the grounds that it would provide a mechanism for greater change by providing a more rational basis of resource allocation.

A steering committee was formed to guide the implementation. At a preliminary meeting in November 1991 the consultants presented a document: “Strategic Cost Management: Achieving Cost Reduction and Improving Customer Service”. The title focused on the issues that management of the Division believed were important.

In the introduction to the document, three key points were advanced:

- That commercialisation should both reduce costs and increase customer service. The potential clash of these objectives was ignored.
- That at the present time there was no basis to substantiate cost reduction. In this environment, cost reduction could be arbitrary and lead to the wrong areas being cut.
- That the strategic cost management project should enable “*structured and rigorous decisions*” which were “*well analysed and defensible*”.

Subsequently I will show there was some readiness in the upper levels of the Department to accept this. The managers believed that structured and rigorous decisions would produce rational change in areas such as the services offered, staffing levels and out-sourcing.

The consultants provided six specific arguments in favour of the Strategic Cost Management project. They argued that it would:

1. help reposition resources to where they were needed or reduce resources;
2. provide quantitative information which would improve on the current qualitative information about performance;
3. decrease the cost structure by eliminating, modifying or combining activities. (This was the first mention of “activities” which were the core of the methodology);
4. improve the organisational structure and eliminate inefficiencies;

5. bring customer service needs into focus which had so far been ignored;
6. focus on the level of resources needed to perform activities rather than try to control spending by the use of the traditional budget.

The consultants' objectives were:

- “(1) to establish product/service costs
- (2) identify cost reduction opportunities
- (3) establish future resourcing.” (Consultants brief, November 1991).

The project was designed to take 16 weeks, and was finished within this time frame. The basic methodology was to survey all of the staff to identify which of the standard activities they performed, each identified by a code, and then allocate their time by 5% amounts to each activity. They did this for themselves and if their subordinates had no subordinates they did it for them as well. At the same time, for each service, supervisors and managers:

- defined the nature of the service
- estimated the volume of outputs - suggesting at least two measures for each
- identified procedures and policies affecting the service
- identified the skills and quality of the personnel needed to provide the service.

They defined a cost driver for each activity, which the consultants defined as “*any factor either internal or external to ETSA which can affect the level of costs necessary to undertake an activity*” (Consultants brief, November 1991). Each driver needed to be unique and have measurable impact. Examples of cost drivers were business complexity, legal requirements, adequacy of training, quality of staff

and safety issues. The defining of these cost drivers, which were difficult to quantify, suggests that the consultants were moving beyond a pure activity based costing exercise to encompass activity based management. At this stage the project was potentially technically flawed, as the pursuing of both product costing and a detailed activity based management system can lead to the failure of the system (Thorne and Gurd, 1999).

The steering committee reported back to management on 6<sup>th</sup> April 1992 and the final report was issued in May. It recommended two general philosophies for the Department:

1. Service units must ultimately perform to market based price levels to be competitive.
2. ETSA should only supply support services which were critical and could be delivered in a cost effective way. Services should be out-sourced if they were cheaper unless they were:
  - of strategic importance
  - services where the service quality from external organisations was not acceptable
  - of such nature that they must be kept inside to minimise risk.

Three choices were given for service delivery. The Department could either:

1. retain the service in-house at current or modified levels of delivery.
2. manage the service in-house but contract out its delivery
3. eliminate the service. Six services offered by the Department were identified for this action.

The report suggested that the Department could and should reduce costs by 37%. It was recommended that the Department review its pricing against external pricing and define the competitive gap. The Business Accountant, Byron, was given the responsibility of driving the cost management action plan and putting into place an ABC transfer pricing system.

## 6.4 A Critique of the Initial Implementation

The role of the consultants was criticised by some staff. The expense incurred enabled the buying in of skills and time which were not thought to be available in-house. The use of consultants at least appeared to keep the project on track and not other more immediate operational issues.

There were many issues raised during the interviews about the implementation, which are detailed below.

### 6.4.1 Technical Issues

There was some disquiet about the quality of the information in the initial implementation. Opinion was expressed that it would take time for a good system to settle down. *“Well again I think it’s a thing that you aren’t going to get right from the onset. Its going to take a number of years to get down to probably some acceptable results”*. As one supervisor observed: *“It wouldn’t have been 10-20% out it would be been 90-98% out off the ball. It was right out of the ball park. Activities were defined too broadly so that some sections had only one activity”*. Other interviewees believed that the criticisms of the accuracy of the ABC system were raised by staff who did not want to accept the changes that an ABC system would create. Subsequently ETSA staff took two actions to overcome these problems. First of all they developed an activity dictionary to standardise the definitions of activities. They then went through several iterations of collecting data which increased in accuracy over time. By the time of the 1994 interviews most managers were relatively confident about the quality of the data.

There was also some concern that the ABC study was conducted at a time when the organisation was going through rapid change and therefore the information became rapidly out of date.

*“We were not only setting up and putting together the sections and branches ...to implement the micro design ... to appoint people to these positions, we were also reducing our numbers significantly, we were offering voluntary separation packages to a heap of people and ... 200 people left in our department during that period that we were doing activity based costing”.*

*“Well I don't think you could avoid it. It had to be done it just coincided with the changing organisation. But we're doing it again now locally and that will be based on a firm organisational experience of 7 to 8 months”.*

At the same time it was argued that the information was needed to bring about the change.

A problem raised by seven interviewees all of whom were in managerial positions was the effort required. *“It takes time, it takes them (operational staff) away from their real dollar earning work”.* One manager raised the problem of the duplication of effort required to fill out the ABC surveys and record labour times for a work management system. He believed that a system which required the recording of information once would both improve the accuracy of the ABC information and save time.

Some other technical issues surrounded the choice of cost drivers and the lack of repetitive activities that would exist in comparison to a manufacturing operation. This problem has been noted in the activity-based literature (eg. Thorne and Gurd, 1999). In particular the ABC system produced answers in terms of inputs (\$ per hour) not outputs (\$ per activity). Neither were bills of activities developed for

samples of standard services which could then be compared to the total cost of an outside service.

### 6.4.2 New Systems Overload

There was a perception that ABC was just one more system loaded on to the staff. They had seen a number of new systems introduced only to be dropped.

*“The flavour of the Trust (it’s unfair to say a particular manager) at a particular time depending on what influence ... they go down a particular path ... in this particular case dollar based systems so you see them come and see them go”.*

One section manager complained that the best practice program had been dropped just as it was producing real results. In relation to the proliferation of new systems one manager discussed whether a world class organisation would be involved in so many change systems:

*“Yes they help you but I have doubts about the cost benefit of a lot of it. We’ve got too many people at Keswick inventing processes for us to implement...”.*

There was little incentive for staff to invest their time in such a system. Their cynicism was entirely justified – ABC was dropped.

### 6.4.3 Impact on Decision-making

There were mixed reactions to the impact of ABC on decision-making. One complaint related to lack of time. *“No-one really has the time to sit down and analyse the stuff because of other things that are happening, people are leaving I mean that’s going*

*to pull the business anyway and until that sort of gets levelled out its really just an exercise I suppose".* The rapid nature of organisational change meant that the activity costs were dating quickly and the managers had little time to use this information.

Some managers did indicate that they had changed aspects of the business as a result of the ABC information.

*"And we made a number of changes to it as a result of that, we had lines of business that were costing us 500 dollars an hour to provide and we'd sort of said why is that and its because we're doing it too infrequently or whatever we've changed the way we do those things so that those costs were brought back to the normal rate of around 40-50 dollars an hour."*

## **6.5 Further Developments of the Activity Based System**

Following the departure of the consultants there was continuing development of the ABC system: *"I think its evolving all the time. Certainly we have done it differently to the way that the consultants did it in the first instance"*. In the interview process during early 1994 two particular refinements to the ABC system were suggested:

1. Data checking and refinement:- *"I think its more so the data that's been put in that needs to be examined more and I guess to understand the whole process a little bit better but as far as changing it I think its just a matter of developing it more and checking the data that goes into it rather than changing it"*.
2. The integration of the system with existing information systems so that the data only needed to be collected once. More importantly some managers wanted the information available immediately at each manager's PC. *"Well what I'd like to be able to do is to have it so its attached to my computer as well so I can keep track or just pull up information but I don't have that. I have to go and ask*

*Byron. The important thing is to get it so that it becomes really a routine way in which we do things so that the data which we enter we only have to enter once and we can pick up the data which is coming through in our other transactions."*

During 1994 and 1995 the ABC system was continued and further refined. Much of my contact during this time was with three accounting staff who had primary responsibility for the development of the system. Two copies of ABC software, EasyABC, were purchased, and a formalised training program conducted. Detailed models were built using the new software. In October - November 1994 there was a major revision of the ABC data. Following the mid-1994 restructure the Department needed to collect new activity data because all the activities had changed. This involved revising the activity dictionary in line with the new structure and preparing a new survey of activity usage.

Transfer pricing rates for 1995/96 were published in early March at the start of the budgeting cycle. They were an essential element in calculating the budget for 1995/96 because the transfer pricing rates were used to calculate the revenue budget based on known work. However the new activity-based transfer pricing system was not bedded down before the next major upheaval. By mid-1995 the accounting staff still driving ABC were in serious doubt as to its future as:

1. the downsizing made the previous data almost useless; both the number of activities and the resource levels used would be reduced.
2. the move to centralised accountability threatened its role as a transfer pricing system.
3. the departure of key champions of ABC in late 1994 and early 1995 left the project with limited direction.

By this stage ABC had been through three years of improvement. Although the accountants had found it to be an extremely useful tool for setting transfer prices,

they had never fed back the actuals or looked at the accuracy of the model retrospectively because the organisation changed each time. It was argued that they could not use ABC to manage operations, as they didn't have the data to do any "variance analysis" and could not use it to manage change. Change had been handled at a rough macro perspective rather than gradual improvement using the ABC information.

## **6.6 The Demise of the Activity Based Costing System**

Eight years after the implementation ABC is no longer used in the Department. Some of the reasons for its demise are relatively transparent. The role of a "champion" in developing a system and educating staff in its use has been highlighted in both the ABC literature (Thorne and Gurd, 1994; Cooper et al, 1992) and organisational change literature (Nutt, 1992). In this case the two key people, the Business Accountant, Byron, Department's Manager, Ted, were both transferred out. Ted had originally committed to the substantial investment in the ABC system. The coherence of the views of the five branch managers towards ABC was to some extent the result of his influence and his regular meetings. He was clearly the most enthusiastic about ABC describing it as "essential" in the running of the business. The Business Accountant was the planner of the ABC process as it was developed by the Department and did much of the training. He acquired more software and resources on behalf of the Department to continue the ABC system. He also gave at least one public address about the virtues of ABC and how it had been introduced into the Department. The departure of these two appears to this observer and in conversations with those remaining in the Department to have been a fatal blow to ABC.

It may be argued that if ABC was really important then it would have been maintained even with the departure of its champions. One of the reasons appears to have been the rapid change in the organisation. The departure of a large number of

staff, the relocation of Ted, the restructuring of the organisation in the light of a new direction by the incoming General Manager were all factors which produced such rapid change that the gradual improvements that may have been expected did not eventuate. The implementation of ABC coincided with the need to transfer price services under a system of business unit accountabilities established by Marrett. Each section was asked to prepare their own transfer pricing system and these varied in approaches. Many of these were paper-based approaches which were labour intensive and cumbersome. The system developed by the Department was an electronic charge system and it generally operated smoothly. It appears that they were generally cost-based transfer price systems; the system adopted by the Department was basically the lower of cost or market in order not to get customers off-side when the Department's cost was higher than the market. Consciousness of being reasonable in terms of cost to the customer was important in the context of an impending open market.

The necessity to have a transfer pricing system dominated the use of the activity-based information. The transfer pricing issue came up frequently in interviews, in twelve out of eighteen of the initial interviews. Two of the interviewees (at lower levels in the organisation) reflected in a highly negative way on the transfer pricing approach, viewing it as a complete waste of time. One of the accounting staff believed that it was their greatest triumph for the year. Most believed that transfer pricing was a highly effective way of making the internal customers but more importantly the staff of the Department more conscious of the cost of providing the professional and technical services. Integral to the transfer pricing approach was benchmarking the transfer price against market prices. Some staff argued a connection between the transfer pricing approach and the issues of change that were being promoted by the managers - customer consciousness, competitiveness and long-term viability. Rather than seeing transfer pricing as the hijacking of the ABC system they perceived it as a core use of the ABC system. The transfer pricing rate per hour was a key variable that all sections and employees could use to monitor their progress. It became a key indicator of performance to create a climate of

change. Byron believed that they had focused on the behavioural issues of change and not worried about exact accounting.

The primacy of the transfer pricing was destroyed by a major organisational change. In March 1995 a new General Manager of ETSA was appointed from the South Australian Gas Company. The new General Manager also appointed another senior manager from SAGASCO as the manager of one of the three subsidiary companies. In the follow-up interviews several staff referred to the dramatic change of culture with the SAGASCO culture and way of managing being imposed on ETSA. *“Two Gas company men destroyed a great electricity company”* said one staff member.

There was a move away from the business unit concept. Re-centralisation of divisional structures occurred and transfer pricing disappeared except between the three subsidiary companies. The new manager of the company of which the Department existed saw transfer pricing as a cumbersome and unproductive process and wanted to organise by functions. In the retrospective interview in 1996 Byron, the former Business Accountant of the Department, was also convinced that some other sections had set up complex paper based transfer pricing system, which was expensive and cumbersome.

A number of staff remarked about their concerns on the change in direction. It was viewed as a SAGASCO culture which was not compatible with an ETSA culture. While some anger was directed at the State government and at the board of ETSA the majority of the negative feeling was directed at the new managers who brought in the new approach.

As previously stated, in early 1995 Ted was also replaced. The follow-up interviews suggested that he had signalled his disapproval too strongly with the new managers as to their management approach. He, with others, believed that this was a move back to the past, to the failed functional organisation rather than moving forward to

an organisation based on entrepreneurial management. The move “backwards” was demoralising and he felt that he wanted no further part of this type of organisation.

In a wide-ranging discussion with the new manager on the 28th June 1995 the future of the Department looked bleak. The manager had been attending a briefing session for the one level of the staff, as on that day a the decision had been made to reduce the work-force by 100 from 287 and the plan was being spelt out to the work-force as to how this would be achieved. There were several meetings going on at the time.

The new manager appeared to continue the previous manager’s concern about the work-force. However there was some belief that he would be more accepting of the views and plans of the senior managers. He explained that he didn’t know the future of ABC. The ideas of business units had been subsumed by centralist approaches. Only two profit and loss statements would be produced in future - one for distribution and one for asset management. He believed that the Department had been the only genuine user of ABC as the other divisions had not been strictly competitive with each other but had continued to operate in the same fashion. The future of ABC no longer lay with the divisions but with the Director of Planning and Finance who believed in the abandonment of divisional accountabilities and the use of central control. There was no clear approach to managing the efficiency and effectiveness of the operation. The appointment of an economist instead of an engineer for a senior management position was a problem to some staff. Although the background was not critical the lack of line managerial experience could be. The approach of these managers was perceived as “centralist” relying on the managers around them and not working through divisional managers. He perceived that the centralist approach would not likely to be readily accepted by many Departmental managers.

The manager warned that morale would be low with the workers: “*there will be many changes in the future*”. The work force would decrease by 100 in the next 6 to 12 months, 46 of those being transferred to another ETSA company where the new

manager could decide whether he wanted them. *“It is easier for a manager of a new section to keep staff than for me in an established function”*. The section had already decided where they would take people from and the work force was being told that people would be offered VSP’s, there would be no targeted separation packages. Workers who did not leave where jobs were expected to be lost would be placed in a redundancy group and relocated when possible. He suggested that all the people that wanted to leave the organisation had already done so, so it would be difficult to get more people to leave. The figure of 100 jobs had not been arrived at by any rational calculation. He suggested that on a pro-rata basis this was about right; but he had been not given a figure. The numbers to go had been decided in consultation with the Heads of sections.

The new Department Manager believed that all the focus was on reducing costs; outsourcing wherever possible. He did not blame the State government as a previous meeting of workers had done. In the post-Hilmer national competition climate, customers using over 10 megawatts of power could buy on the open market and the organisation had to be able to meet the threats. Although the greatest threat lay with generation, Distribution had the opportunity to make the biggest cuts and had been made the target.

## **6.7 On-going Use of ABC**

A review of the Department was called for in 1996, by the senior management of ETSA, and a standing working party of three people was set-up - an engineer, an accountant, and a human resources officer. The accountant went back to ABC information to look at the performance of the sections within the Department. The concentration on transfer pricing having gone, there was a swing back to using the information for making decisions. ABC was now used to determine which functions the organisation should continue with and which functions should be out-sourced.

This brought ABC's use back closer to that which was originally intended by the consultants.

The new approach included a contestability approach by externally benchmarking the cost and quality of specific service delivery. External commercial organisations participated in quoting against internal crews for new work, upgrades, and maintenance. There was a shift away from a comparison of hourly rates against outside prices, as was the case with ABC. The concentration was not just on hourly rate but how many hours were used. This was closer to a true ABC system, where an activity rate and the usage of an activity would be determined.

The benchmarking project looked at a comparison of a greenfields site, an upgrade project and 4 maintenance projects. Cost structures were built up as follows:

- Direct costs and immediate indirect
- Overhead - direct supervision, planning, security readily traced to the project
  - indirect Departmental overheads of management
- ETSA Power – the company of which the Department was a part
- ETSA Corporation – overall central administration overheads which were still being passed down to operational units
- Contract maintenance (for the bench-marked alternative).

This new approach was used with success in late 1996 to convince the Board that work should not be out-sourced. ABC data was therefore used successfully whereas the early ABC information had not had this impact. Some members of the team reviewing major projects believed that ABC would be useful to improve the information being developed but did not move to develop this further. The problem was that the ABC information being used was now out of date because there was no-one left to maintain the system. It was used because it was better than nothing.

For one of these contracts I sat in on the discussion with the foreman of the area to ascertain the differences between ETSA and the benchmarking organisation. There was some concern that the benchmarking organisation was “low balling” in order to get in to ETSA. It was not therefore just a test of one project but a test of whether ETSA should be in that particular field of activity. Differences were identified in terms of supervision, plant use, and work practices.

By early 1997 there was a growing disillusionment in the Department in relation to the flow of work into the Department. Out-sourcing was happening without any attempt to allow the Department to be involved. A one million dollar contract had been let to an external party without reference to the Department, which had traditionally been involved in that kind of work. Previous managers of the Department claimed that they had never been pushed to unnecessarily out-source work. Now the control of work had been taken out of the hands of the Department and out-sourcing had apparently become the standard. The Department was providing quotations for its services but it was claimed that they were part of a game where the job would go outside anyway.

Donald, a contract accountant, brought in to help during 1996 and 1997 was surprised and disappointed that the managers below Clive Armour could not see the benefit of transfer pricing. There was no basis of calculating the full cost of a project because the data did not exist. There was no longer any basis of accountability in the Department. ABC had been taken away but nothing put in its place.

Of all the staff only Garry, one of the section managers under Ted, had no regrets about the passing of the ABC system and the system of accountability that Marrett had set up. He saw this as a phase that ETSA had needed to go through in changing its culture and the organisation had now moved on. There were other ways of contract costing that would produce a reasonably accurate result and ABC was not needed. Garry was the exception. It was clear that of all the staff involved in the Department he was one of the few winners. He was comfortable with the new

management style because he was a senior player within it. He had no reason to be cynical like those who had left voluntarily or had been forced out.

## **6.8 Evaluating ABC Success**

The ETSA experience can be compared to the literature reviewed in chapter 2, to identify reasons for its lack of success. Shields (1995) concentrated on seventeen factors that may be associated with ABC success. Of these factors only six were significantly associated with ABC success or receiving a financial benefit from ABC.

The first of these, top management support, often emerges as a key factor in the implementation of new techniques and change programs. In this case the top management of the unit that implemented ABC was totally supportive. The senior management of the organisation as a whole was also supportive. However, when reviewing an ABC implementation longitudinally top-management support is not a constant. While it may be there initially it may diminish over time. The mean and median of the Shields (1995) survey was 19 months. Over the years since ABC was implemented in 1991 there were a number of changes in top management. Top management support disappeared and ABC is not likely to be implemented again until there is genuine support in the new entities that ETSA has been formed into. At the time of the completion of this thesis, ETSA had been leased to a Hong Kong conglomerate for 200 years. The future of ABC will be in the hands of the new management.

The second factor that Shields found to be important was linkage to competitive strategies. There was clearly a link with competitive strategies to become a best practice service supplier at the time of the implementation, but these strategies changed rapidly. New managers were more concerned about getting costs down than focusing on a structured approach to decisions.

There was no clear linkage to performance evaluation and compensation, the third of Shields important factors. Cost achievements and the removal of uneconomic activities were viewed as a collective goal not rewarded at a Departmental or team level. The reward could have been to retain one's job, but even that did not seem likely in the unstable circumstances.

The fourth factor of training in implementing ABC appears relevant to the failure of ABC in the Department. Although the senior staff of the Department understood ABC, there were several lower level employees who either did not know about ABC or did not understand it. There was limited evidence of a systematic training program at the start of the project. One supervisor complained at both interviews about the level of training in financial control including ABC. Following complaints a one day training programme was put on at a conference centre, run by the accountants from within the Department. The supervisor believed that that day was the most demoralising experience of his life at ETSA. In his view the course aimed too high and he remained in ignorance over the methods for day to day financial control. Over time, new supervisors came in and they did not receive any training in ABC. Hence there was decreasing levels of comprehension of the system.

Shields also identified non-accounting ownership as a cause of failure. In the Department, ABC clearly came to be perceived in its early life as an accounting system. The dominance of transfer pricing was partly responsible for this; the dominance of accountants in the project team was also responsible.

The last factor was adequate resources. Overall the evidence from interviews and reports indicates that the project was well resourced at the start. At the start the organisation paid a significant consulting fee to implement ABC across all the sections of the Division of which the Department was a part. Documentation from the implementation indicates that the project team was well resourced. Within the Department, the Business Accountant was supported by three other accountants who were involved with and understood the ABC system. The Department purchased

several copies of an ABC software product - there was no shortage of information systems resources, either software or hardware. The resourcing of the ABC system was diminished when the accountant responsible for the implementation took a package. This was not the major reason for its demise.

Of all of these factors, the lack of top management commitment over an extended period stands out as the principal issue in the demise of the ABC system.

## 6.9 Changing the CEO and bringing about change

The role of the CEO in bringing about change has attracted the attention of management researchers. There were many comments about the new CEO, Clive Armour, and the new CEO of the Division under him, Basil Scarsella, and the changes which they brought.

- *“Can one manager be so powerful as to derail a whole process? Yep, he’s done it. He is the General Manager and he’s done it. You might have asked that question when he was appointed to the position, but I can tell you he has done it.”*
- *“Two Gas Company people wrecked a good electricity supply company”*
- *“I think the State Government did ETSA in the eye when it appointed Clive, not only appointed Clive but let him bring all these Gas Company people with him”.*
- *“I’m glad to go since Clive Armour and Basil have come into the place. ... I feel we’ve gone so far in one direction and instead of going further they went back to where we came from ...”*

All of these comments could be read as resistance to change from people left out of the process. However, they saw themselves as people who were forwarding change

and the incoming managers as people who were resisting the trends and future of ETSA which Marrett had set up. The abandonment of ABC was seen as a step backwards not a step forwards.

That a new CEO is an outsider has been seen as a key determinant of the level of change. The two new CEOs in the period of this study, Robin Marret and Clive Armour, were both outsiders and had no allegiances to past processes or structures. Rather than focusing on the issue of outsiders compared with insiders, Fondas and Wiersema (1997) suggest that socialisation is the most influential factor guiding the change process. They distinguish between individual differences and situational demands in bringing about change. Individual differences include work experience, educational background, and personal characteristics. CEOs more likely to be socialised to bring about change are those with an extensive and varied work experience. Similarity to the new position is an important issue; which explains why Armour could move between energy suppliers and be ready to bring about change. CEOs with an internal locus of control will believe that they are able to bring about change, rather than relying on those outside of them to initiate change. This also appears the case in relation to Armour.

Situational demands include the requirements of the role and the characteristics of the socialising agents. Role requirements are important in Armour's case because he accepted the position with a high degree of managerial discretion and with high expectations of outcomes. Almost immediately on taking over the job he announced a further 500 redundancies. This was perceived ETSA employees as fulfilling his mandate given him by the Board and the South Australian government. Fondas and Wiersema (1997) identify these as important characteristics. Socialising agents may include other outsiders who are brought into the organisation with the CEO. Armour brought Basil Scarsella, who was also from SAGASCO, to support him in the change process. Both individual differences and situational demands are significant in the ETSA changes.

## 6.10 Conclusion

The Strategic Cost Management project began with high expectations. In a climate of change it was considered by managers in the Department to be a useful tool in restructuring the Department as a viable operation. Over time it obtained an importance as a transfer pricing system. Here was a fundamental problem for ABC. Although senior staff in the Department perceived its transfer pricing role as strategic, it was not widely seen as a strategic management tool - it was just a transfer pricing system. The end of transfer pricing meant the end of ABC. There were staff trying to use the ABC data even after it was out of date. It was useful information for understanding cost structures. That ABC understanding is still embedded in the organisation. The investment in time and resources may still bring results because there is a consciousness of the potential value of the information.

The system also relied upon the human resources of the accounting staff and dual champions of Ted, the Department Manager and Byron, the Business Accountant. The departure of Byron was recoverable in one sense because there were at least three other staff who had the expertise to collect, process and disseminate the results of the ABC system. The accountants became progressively under-resourced as a result of the departure and non-replacement of the Department's accountant. ABC was dependent on sufficient resources to keep it going. The lack of commitment from the new Department Manager made the future of ABC untenable. Unlike core systems, such as a General Ledger system, investments in other accounting technologies can be viewed as expendable.

The critical point of this chapter is to describe how a system is transmuted over time so that it bears little resemblance to the system that was originally set up. ABC started off as a system for making strategic decisions. It then became seen as primarily a transfer pricing system, with anticipated behavioural responses. It swung back later to being used for strategic decisions concerning the price competitiveness

of the Department's services. This process was hindered by the lack of management support for continuing to build the ABC model. Finally ABC disappeared. ABC is still in the mind of some of the staff who now have leadership positions for systems development<sup>13</sup>. The future of the system will depend on the attitude of the new owners to this structured approach to decision-making.

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<sup>13</sup> An embargoed MBA project 1999 "An Analysis of ETSA Utilities' Costing System" makes reference to this point

## **7 A model of the development of the activity based costing system**

The purpose of this chapter is to develop a model to explain how a major development of an accounting and management system, the change to ABC came to be accepted by the managers and senior supervisors of the Department. What were the forces within the organisation which led to the change being accepted? Why would an organisation agree to invest so many resources in an ABC system and keep developing it? The answer to goes far beyond the relatively simplistic answer of the previous chapter, that it was recommended by an external consultant.

The inductively derived model is presented in Figure 7.1. In some ways I am uncomfortable with a model because it implies exhaustive explanation of the circumstances, and presumes to simplify a complex set of historical, social and organisational forces: “Linearity is a trap which forces an impoverished representation of events, their constitution, and their inter-relationships” (McSweeney, 1996, p.216). At the same time a model is useful to help order some of the rich complexity and convey the relationships I have identified.

Amongst many approaches to writing up grounded theory, Glaser (1978) suggests that a model is useful. His concern (Glaser, 1978, p.82) was that models “are given to too much logical elaboration which never becomes grounded, but appears rich to write about”. In other words, Glaser is concerned that models can be used to extend beyond an analysis grounded in the experience of the actors. Given that I am working more in the tradition of Layder (1993), I am happy to incorporate material not grounded in the experience of the actors but from history and other sources. Therefore I have no concern about logical elaboration which is not “grounded” in the views of the actors.

My main goal<sup>14</sup>, in developing an inductively derived theory was to identify a core category – “... the main theme ... the main concern or problem for the people in the setting ...” (Glaser, 1978, p.94). The core category in this theory was survival. Glaser (1978) sets up eleven criteria for what is a core category.

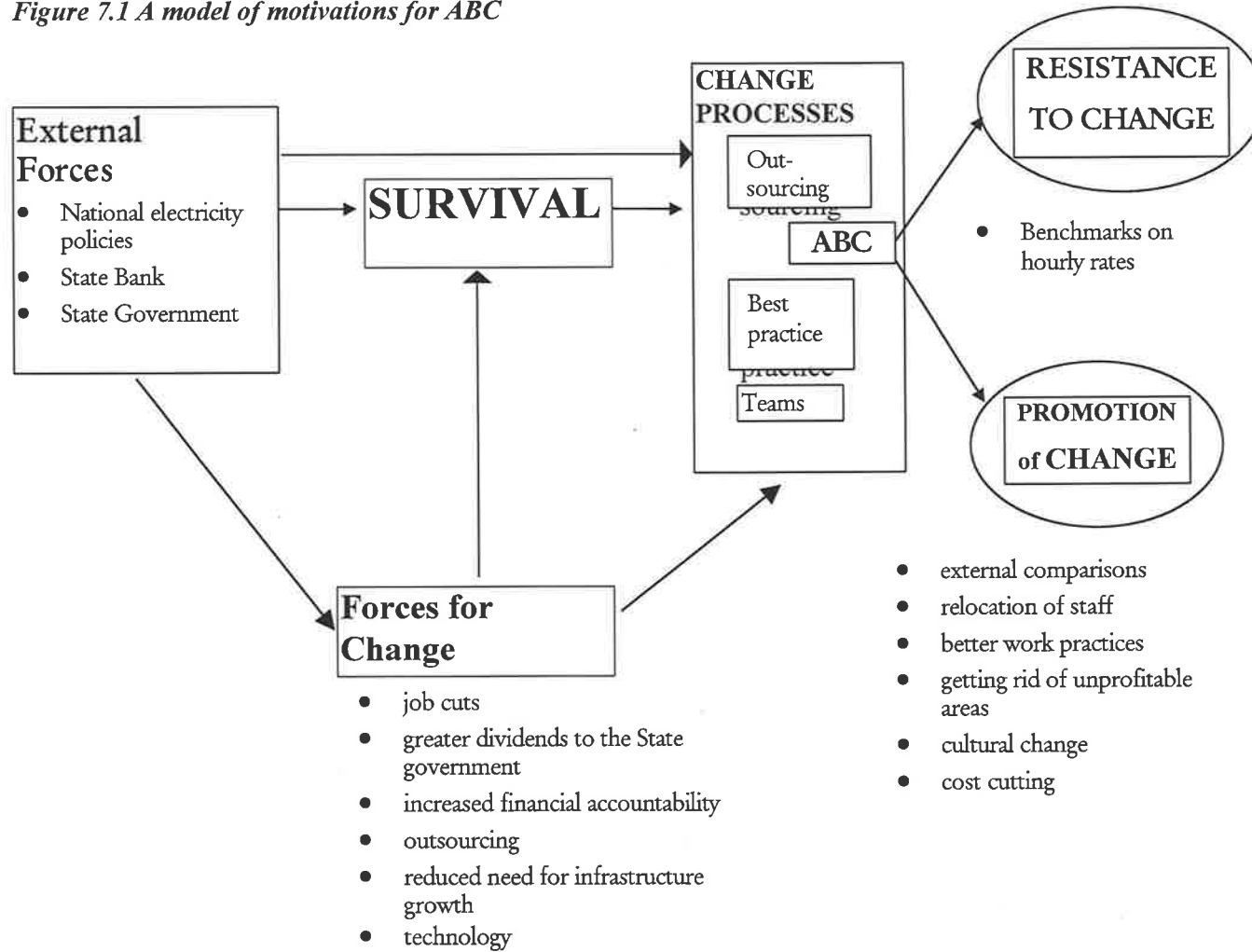
Based on my approach to data analysis there are five points which appear to be pertinent:

- Centrality – it links to as many other categories as possible. The concept of survival does link to antecedents and consequences. Figure 7.1 demonstrates the level of linkages.
- Reoccur frequently – the concept of survival and/or related concepts such as long-term viability, competitiveness occurred in most discussions. It was the most frequently occurring key category.
- Has natural connections to other categories – it connects to other categories like the “causes” of the attitude, such as the threats generated by the election of the new state government, and consequences, such as survival tactics.
- Clear and grabbing implication for formal theory – The rest of the chapter shows these connections. Survival has clear implications for formal theory, although it is not a concept which is written about in formal theory.
- Considerable carry-through – The relevance and explanatory power of “survival” is sufficient to hold the analysis together.

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<sup>14</sup> This is also Glaser’s first concern. “First of all the analyst should consciously look for a core variable when coding his data” (Glaser, 1978, p.94).

Figure 7.1 A model of motivations for ABC



While survival is the core category there are two key consequences of the attitude of survival from those in supervisory or managerial positions:

1. the managers and supervisors of the department saw ABC as a means of defending the Division against down-sizing and unnecessary out-sourcing. The use of accounting numbers was expected to be useful in protecting their own jobs, their workers' jobs and the organisation to which they felt some attachment. The events that transpired demonstrated that accounting numbers might be powerless against overwhelming change.
2. ABC would be a useful tool for managers and supervisors to create a change in culture, reallocate resources and eliminate unproductive parts of the Division.

In the following sections each part of Figure 7.1 model is explained.

## **7.1 External Influences for Change**

In chapter 5 the international, national and local issues that were impacting on ETSA in the early 1990s were explored. The international impact was indirect. The international electricity industry provided benchmarks for "world class" performance, which were being picked up in the national reports referred to in Chapter 5. The need for international comparisons was raised in the national reports which were guiding national and therefore South Australian policy on industry development. Superficially, by world standards, ETSA appeared inefficient. The comparisons with international best practice were raised by only one interviewee. Members of the Department focused more on the local situation than the pressures of globalisation. International competition might mean that multi-national companies would move to areas with the lowest costs including electricity prices.

At a national level there was a general move to drive down the price of electricity in the new competitive market of the national grid. For the first time there was a

national market coming in the near future where any consumer of electricity could buy from any producer in four States of Australia. The National Electricity Market kept being postponed through the late 1990s but eventually started to be implemented. The development of a national market raised real challenges for ETSA. ETSA appeared to compare unfavourably with other states in terms of labour productivity and therefore cost. In 1994 ETSA needed to cut operational costs by \$70 million just to remain competitive with the eastern states<sup>15</sup>. One of the problems was scale. In 1994 Byron, the Business Accountant, remarked:

*“I think we supply probably 6 or 7% of the electricity supplied in the eastern states. So they thought it was reasonable to keep us vertically integrated. I think now with the national grid ... really face potentially being swallowed up” (Byron, 3/3/94).*

Russell, in the Divisional office, acknowledged that national competition was a real threat. At the same time he identified activity based costing as an appropriate response.

*“We are constrained to some degree by our tariffs and because we need to keep our tariffs low we need to provide an adequate return to our owner and therefore we have to concentrate on our cost and get our costs down. That’s where our activity based costing and activity based management come in...”*

In particular the generation division was concerned that it could not be competitive while it burned low-grade lignite from Leigh Creek.

As discussed in Chapter 5, the events within South Australia of the State Bank and the election of the Liberal government created a climate in which reductions in the

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<sup>15</sup> Source – Byron interview 3/3/94

size of the public sector were expected and increases in efficiency became critical. Brenton, an engineer, was very concerned about the perceived inefficiency of ETSA, and saw this as encouraging increased State government intervention:

*“... electricity seems to be something that the media loves to bandy about how inefficient we are, and incompetent we are. As well, there are obviously the implications of the national grid, which are going to affect all electricity authorities in Australia. So from where I sit, government interference is increasing.”*

The State Government expected larger dividends each year. The shift to national competition meant there was strict control of prices. Russell’s view was unarguable – the only real source of achieving this was through cost reduction.

## **7.2 Forces for Change**

The impact of these influences was to create a climate of change. There were several forces for change identified in this study.

(1) Reduction in employee numbers - The most obvious sign of and force for change was the apparent obsession with achieving rapid reductions in staff numbers. Staff reductions had the following impacts:

- They created a feeling of uncertainty about the future, the expectation of life-long employment was destroyed, *“Security’s gone out of it..”*. The staff could see that ETSA was becoming a commercial, profit-focused organisation. The paternalistic caring organisation where jobs were guaranteed irrespective of performance was gone; functions and the job positions that went with them would only be kept if viability could be established. While the earlier change management programs could be ignored, the departure of so many colleagues could not be.

- The reductions in numbers meant continual re-organisation. There needed to be constant rearrangement of structures to accommodate the diminished numbers. There were not the staff available to do all of the work previously taken up so out-sourcing was essential.

(2) Greater profitability and dividends to the State government - The State government as the owner of ETSA began requiring larger dividends in the early 1980s. This trend increased in the late 1980s and early 1990s. The State Bank losses increased the urgency to produce greater dividends. With price rises under continual public scrutiny, cost cutting became the dominant tool for increased profitability and dividends. At the time of the failed ETSA merger with the State provider of water and sewerage service (EWS) there were almost guarantees made of increased dividends:

*“we’ve got to deliver savings in costs, increased dividend to the [State] government next financial year. ...another challenge is to produce the savings which were promulgated by the merger team [ETSA and the E&WS]. People from ETSA took the view, look we can save the 50 million anyway even if we didn’t merge and so now we have got to deliver the goods”.*

(3) Outsourcing – Outsourcing was a response to the pressures coming upon ETSA but it was also one of the forces of change. It is discussed further in the next section.

(4) Increased accountability - Devolution of control by Robin Marrett brought with it greater financial accountability. As Laughlin (1996) comments about the Financial Management Initiative (FMI) in the U.K.: *“Key to FMI is an apparent financial freedom. Yet what is implicitly behind FMI is not freedom but greater control.”* (Laughlin, p.238). The devolution of accountability to divisional managers had made them more conscious of financial performance. The process of increased accountability had commenced in 1994 when the ETSA Act

brought ETSA under the control of the minister and parliament. ETSA was no longer an independent statutory organisation but a part of the public sector, open to the scrutiny of the public and a topic of political debate. The level of its performance also became a key issue.

- (5) Reduction in infrastructure growth - ETSA was an organisation based on growth. From its inception it had been through forty years of expansion of the building of a State-wide electricity network. The network stretched throughout most of the state by the 1980s. In addition there was rapid development of industry after World War II and a rise in population requiring the continual development of residential power infrastructure. In the late 1980s the population growth slowed and ETSA found itself geared up to a much higher level of capital development. As Philip, an engineer, said:

*“Up until a few years ago we've really just been building power stations and transmission lines. We've been on a fairly big programme of building our infrastructure and money wasn't an issue. There was plenty of money, if you needed to do it, the money was available. Things have changed, there is no money available, and we are not building a lot of lines because we've really built the infrastructure. So we're now in the business of maintaining the lines and refurbishing and those sort of things. So with those issues we've had to look at our organisation, get rid of the people that now are not required to do the sort of work we did before ... and not having the money to do it ... and compete with possible people that could provide the same...”*

- (6) Technology - One manager believed that technological change had and would remain a powerful inducement to change. At one level this included infrastructure including the increased use of PC's and telecommunications including Email, fax and remote computer access. At a higher level it included task specific technologies that would change the use of labour in generation, sub-stations and transmission. The eventual introduction of electronic metering

would end the manual meter readers, providing immediate precise readings of both electricity used to date and the rate at which each user was drawing from the system.

### 7.3 Survival

Survival became the core category of the rationale for developing and maintaining ABC. This concept came up in almost every one of the original interviews as an essential issue for the Department. Given the state of the Department and the environment of ETSA, this should not have been surprising. The perception in the Department was that they could see the issues more clearly because of the nature of their activities. This was not true of other parts of ETSA, where the survival instinct was not so strong:

*“... So people know that survival is on the performance of the business. ...the people in the zones, I think they’re still feeling as if they’ve got to open a cheque book and they can pretty well do what they want ...”*

Although the concept of survival was not surprising it is remarkable that so little seems to have been written about organisations where people are in survival mode<sup>16</sup>. Even actions that seem to be forward looking, like offering services to the private sector (“reverse out-sourcing”), can be interpreted from this single dominating issue – survival:

*“...financial survival, being financially viable ... that means getting as much work as what we can and even looking outside ETSA there*

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<sup>16</sup> An extensive search and enquiry in the management and information systems literatures resulted in little information about the behaviour of managers who believe that they are in survival mode. There is a literature about organisations that survive, and their characteristics. There is a further literature concerning survivor syndrome, the attitude of those who do survive and are left behind. There is less about managers and employees striving to survive. Perhaps there are fewer circumstances where future survival is not guaranteed and yet employees have little or no time to make changes.

*may be opportunities depending on legislative changes and that if contracts can compete against us we should be able to compete against them”.*

People in survival mode will take all possible steps to continue. ABC was one of the survival activities. There was confidence by some that the Department would survive: *“If the government leaves us alone we’ll survive”*. Others were not as confident about the survival of ETSA or the Department. Some believed that the eventual privatisation of ETSA was probable or at least possible. This was at the largest scale because of the realities of international competition. *“ ... but I think there’s room for improvement still and I think we need to do something to survive. Overseas they’ve got private firms that run power authorities...”*

For some the hope was there that even if they were privatised they would be able to continue as a unique entity doing the same functions. They may have appreciated their vulnerability of being kept in a publicly owned utility, but they did not want to see the Department destroyed.

*“I suppose that history has shown in the past that ... groups [like the Department] tend to, given the new approach, be...privatised. We want to be in a position that when that happens we will survive and not be sort of stripped. Those are the big changes that we face...”*

The survival concept existed at several levels in the Department, and in different forms. Some of the quotations speak of survival in terms of saving jobs, their own and those around them:

*“...Bob echoes the same thing, we’re both about the same age ... and we’re looking at another 10 years employment, so we’re trying to keep the thing going keep the ship floating for awhile longer”*.

They recognised that the survival of the Division was threatened by some of the factors outlined in sections 7.1 and 7.2. Some could see that the State Government

wanted to out-source as much of ETSA as possible - this was an immediate concern in a section that was a service provider and highly susceptible to out-sourcing.

*“... I think T ... put it in a nutshell because he said, “You are in a survival mode, you’ve got to compete against other people, if you don’t do the right thing you are out the door” and I think the sooner people appreciate that the better off we’ll be...”*

Although the managers and supervisors were committed to survival, they acknowledged that there was a small minority of staff members who were not committed. Those who worked beyond the June 1994 staff reduction tended to be more committed to the organisation; but there were some left behind who were too young to retire and lacked the necessary skills to find a job outside of ETSA. There was a belief that the non-survivors had left. *“...but they [the people who left] thought ETSA wasn’t going to survive or they didn’t want to survive”*. Survival meant that jobs would continue to exist in the medium term.

They could not survive on size or tradition. The sacred cows and protected empires of the old ETSA were a thing of the past. They could only survive by being seen as excellent performers:

*“They are aware of the fact that their survival, the business unit depends on doing things that we do well rather than necessarily having an empire. We are not going to be into our survival by building an empire around us. Our survival will be dependent on doing what we do well and they see that now”*.

This excellent performance incorporated both quality and cost considerations. They could survive by developing more external customers as well as internal customers; and offering value for money to customers in terms of extra services:

- *“being financially viable that means getting as much work as what we can and even looking outside ETSA, there may be opportunities depending on legislative changes”.*
- *“.... Making the place profitable. This is an organisation that’s probably headed towards privatisation. Because we are a service group, we don’t own the assets any more. We just offer our services. We survive on the basis on our engineering ability which we have no doubts about, and our profitability which we do have some doubts about whether we can go out there and run a successful business...”*

To do this they needed the support of senior management. Those managers were seeking their own survival, and in so doing were not allowing the Department the opportunities to function in survival mode.

*“... That’s what I’m pushing with them [senior managers] all the time. Get a company to take power from us for \$x, but say we’ll provide this service as well. That’s one way that we’ll survive as ETSA in comparison with interstate; because there’s already people interstate sniffing S.A. saying, “Buy power from us cheaper”. It might be cheaper but what service can they provide. We need to function as an independent business unit, but they don’t give you the rope to let you function. They want to hang on to everything. Don’t know why, probably they fear for their survival I guess”.*

Some believed that senior managers were prepared to take enormous risks and threaten the electricity network to achieve the financial goals they had set. A new breed of manager was encouraged, not the traditional engineer who wanted to see the distribution of electricity set up in a way which would minimise the risk of black-outs.

In the retrospective interviews one staff member was convinced that although senior management wanted to survive they did not want the Department to survive:

*“...they [the staff in the Department] were doing it not to feather their own pockets, which they always did before, but to ensure their own survival. Those indications to me were that it was working and working well. This was how they [in the Department] were going to survive ...because these guys down there wanted to survive. But in the end the people at the top said we don't want it to survive, 'We don't care'. And that's when they [staff in the Department] lost heart and gave it all away”.*

Being seen to be cost competitive and therefore financially viable was very important. Survival from this perspective meant managing the financial side of the operation well. The following comment from Barry, a supervisor of a workshop, sums up this belief, as he reviews the priorities he has as workshop supervisor:

*“Number 2 would be our ... survival and that's through financial viability. In the past, in years gone by, any big organisation regardless of whether government or private generally money wasn't a concern but now it certainly is. ...so very budget conscious and we have to service our customer well otherwise our customer will go somewhere else and that we haven't got a job so that's my second priority - business survival. So that's the key ones that I see”.*

Those in supervisory roles realised the need to become tight financial operators, not just be good technicians and engineers:

- *“...I've begun to realise that, hey I am responsible for this money and I have to look at how its being spent and do we need to spend it all. At the end of the day it could mean our survival or not. Its only going to mean more in the future than what it does even now.  
...”*

- *“...So that’s the first one, one of ensuring the group’s survival overall, its all interrelated, do a professional job with the jobs completed on time, on cost. ...”*

Survival to some meant working with people, while keeping an eye on financial outcomes, to move forward:

*“If you get that team supporting you and you’re doing the right things you’re marking the service of this group, which is one of my roles, you’ll survive. Long as the government allows us to. So support the people. People support you. Long as you’re watching the figures. Important thing from this position here watching where you are on the scale you’ll survive...”*

Survival for one supervisor meant putting the position clearly to his workers and encouraging them to respond. If they did not respond they would all fail:

*“... we’re not protected so its a case of either we pull our socks up or you basically go. It’s a funny incentive to do the right thing. Provided we’re careful and we do the right thing I think we’ll survive, but if we don’t we’ll have problems. So I always try and focus people on that a bit, make them do the right thing. Initially you just confront them yourself and ... you just try and say well say just the old survival ... we need to be doing this otherwise we just won’t survive...”*

The term “confront” seems very strong, but there were staff under him who thought that they needed more confrontation. Non-performers received few sanctions and effectively pulled down the performance of the group and threatened the survival of everyone.

*“... targeting any of those people but there will be the odd individual amongst those that will still be in that old mode and that’s the thing they need to improve on if they really are going to survive. I think the*

*Trust as a whole is a good firm to work for too. No really it is its just a shame that government policy have made things change in recent times.”*

The survival position had changed the ground rules for workers. There was going to be less emphasis on keeping the workers happy and meeting their needs compared to putting in place the environment and attitudes that would guarantee their survival:

*“... so as a result of that there was a whole lot of human resource issues that hopefully we’re starting to come to the end of now. I think what’s happening now. I suppose the survival thing is becoming of greater priority now so the emphasis is shifting a little bit from the keeping the people happy, dealing with the human resources issues to if we don’t have a job well it doesn’t matter anyway. So its sort of shifting that emphasis more towards the survival. We need to structure the business and get the business in such a form that you have some sort of future about us. ...”*

Those in managerial positions in the Department put the onus on the workers to change their attitudes and give a bit more to bring about the survival of the Department and Australian industry in general:

*“... I can’t see that happening knowing the mind processors of the general Aussie worker but that’s what I think we need to do to survive...”*

There were few managers who openly espoused this attitude. Most considered their staff generally hard working and committed. At times in the cafeteria, employees would comment on the managers. Although Ted, the Department Manager, was widely respected, there were some who thought that the managers of the Department were not very innovative and that the operations could have been run much better. In other words, they felt that managers deserved what came to them.

To others survival meant that they should not focus on administrative reforms but concentrate on technical issues.

*“.... If we were really competitive, I wonder if we would be doing it [ABC]. If we were really serious, I think there’s something that ‘s come about in the last few days. The heat’s really on and we’re really in survival mode would we be doing performance review and development, job evaluation, job design strategic cost management all of those sort of things, none of which are earning dollars....”*

This begs the question whether the person concerned was focusing on short-term or long-term survival. For short-term survival, ABC was useless. However most staff seemed to be working to a longer time scale.

The core concept is therefore survival – what could the Department do to hold its staff together and keep going in a similar way to what it had in the past?

## **7.4 Change Processes**

The survival attitude brought about a range of responses from the staff of the Department. Out-sourcing was a pressure from the State Government but it was also a response the Department could make to keep its costs down, and get rid of activities it did poorly. Work teams were formed to build a more collaborative approach than managing within the old hierarchical structures. Teams were also designed to increase the skills applied by all employees to their jobs. The best practice programme was initiated by the senior management of ETSA to bring about improvements in work practices, but was seen to have some use by Departmental managers in bringing about change. The other response was the ABC, or strategic cost project.

There may have been other initiatives, but these were the main ones identified during discussions and interviews and minutes of meetings.

### 7.4.1 Outsourcing

The shift to outsourcing was raised by nearly every interviewee. For example:

- *“I think its inevitable that we are going to out-source a bit of our work. How much I don't know”*
- *“They'll send it off to somebody else to get done ... We've been forced into that”.*
- *“... strategic decisions ... about what we should and shouldn't be doing”.*

The move to greater use of outside contractors was both a motivator and a result of external pressures. It was a motivator in that it showed that ETSA was serious about operating in a manner where commercial viability was critical; and employees would have to become more efficient and service oriented. It was a result of external pressures as the State Government was encouraging all State governments departments and authorities to out-source. In addition the implication in national energy reviews that out-sourcing was generally superior to in-house services. The link by employees to the State government was clear:

*“I think the Liberal government is hell bent on an outsourcing trail - I think it's payback time for the government. There is a saying “We supported you to win government - now you support us with some work”. I don't necessarily believe that private enterprise can do it better or cheaper; I compete with private enterprise now but I'm not allowed to”.*

However, over time out-sourcing was essential, as ETSA no longer had the skills or capacity to supply its needs. The large reductions in employee numbers necessitated out-sourcing:

- *“We no longer have the people able to do ... modifications that we’re doing that’s all going out to contract”.*
- *“Well there’s two ways of approaching it. Either we don’t do the work as often or we get contractors in”.*
- *“Yes, that’s the biggest problem - lack of resources. See everybody left but the work didn’t go away. So what you do now is out-source your work. But who can say you can do it cheaper with a contractor. That hasn’t been proved yet has it? But they forced us into that position or they forced ETSA into that position by getting rid of your numbers. Work hasn’t gone away ... still there but there’s no resources to do it”.*
- *“That will be done by contract only because the Trust hasn’t got the resources to do it any more. ...seeing the Trust develop over the past 30 years the 275 ring around the system ... its sad to see anything of a similar nature be put out to contract and not have involvement with it. We tend now to feel like sort of maintenance people, handling the local work which the management or the government cannot put out to contracts because contractors don’t want to be bothered with that sort of fiddly messy very labour intensive jobs - that’s the perception we have. This hasn’t happened yet because we’ve only just started down this road. We’ve already started to change within our own local group.”*

There were managers and supervisors who believed that setting the business up as a core business able to handle a standard load of maintenance and small development was appropriate. Capacity to support the peaks should be bought in from outside:

*“If it was to be a boom then we clearly couldn’t handle it ... we would then look at ... bringing in outside private sector involvement in some of the development work, which we traditionally would have done*

*ourselves... But that's our strategy. Cut ourselves back so we're really only on a core business, highly value added, high levels of technical skills and supplemented by contracts with private sector ... if you look at the overall cost of holding that department together it's clearly the way to go".*

There were others who, seeing the deadline for real competition arriving from July 1<sup>st</sup> 1995 viewed the future with some concern.

- *"... whether or not we remain within ETSA or get privatised or corporatised or whatever, which is sure as night follows day, that's what going to happen. That crunch time will be coming within the next 12 months I would say for us."*
- *"Its been explained to us that if we cannot keep our hourly rate to a ... competitive level at the death knock ... June 95 ... our customers can go outside of the organisation and get quotes for work. ...I guess being a very dollar orientated organisation if somebody else ... can do the work cheaper than what we can do it ... that's a real concern ... So yes that has been explained to us and we are aware of that but I think we are still in that band, the honeymoon period where it hasn't started to affect us yet because nobody at the moment is allowed to go outside the Trust".*

The push to out-sourcing was also having some impact on customer service. If they were to survive, they had to do it better than everyone else in the eyes of the internal customer. This involved providing the same quality, within the same time lines, at the same price. From this perspective the out-sourcing threat was a powerful motivator.

*"... everything is coming down to being competitive with the contractors and you've got to do your work efficiently, so that you try*

*and keep the guys happy with the work they want done, otherwise they may opt to go to a contractor in the future and that's really come into vogue now".*

From a cost perspective some of the employees believed that they were competitive. However, even then they were convinced that the move to out-sourcing was as ideological as commercial.

- *"So it's a new learning game about ... putting information out to get the people in the private sector to pick up those duties. ...you have to be competitive. At this stage we are quite competitive. [If] we are not cost competitive - no argument if we can do it better than the people outside in quality and price we should ..."*
- *"The threat is contractors too but that's not a real problem 'cos we can compete ... whilst we're allowed to"*
- *"We've actually succeeded a few times to do that because they've gone off and compared prices with contractors and contractors prices are a lot higher"*

Contracted services were mainly for support activities, but employees knew that this would move towards the core business:

*"Well we certainly do a lot of outsourcing. We run scheduled rates of contracts for tree trimming, for aeroplane use, and for working on the transmission lines. We keep a fair idea of what those schedules of rates are and we know where we sit with those in comparison. So we're getting a fair idea but some of these things are very competitive and they are fairly low value added work like tree trimming for example".*

However few major contracts were put out to tender. During the retrospective interviews in 1997, one former Supervisor from the Department said that up to then no project had been put out to tender on the basis of accepting the lowest price. If that had been done in 1994, he argued, there would have been a much more rapid realisation by the workforce that there had been a change in operations and they would have rapidly changed their work practices. In 1996 several projects were competitively costed against external providers. The problem with this type of exercise is that external providers are not happy to be used as a free bench-marking service when the job will be done by inside staff anyway. To provide for this external service providers were paid to put in a tender.

In 1997 there was a major change, with a \$1 million contract for the Kilburn sub-station going outside, without any opportunity for internal quotation. This was a major blow to the morale of internal work teams because it indicated an end to the assumption that there was still a preference for work to remain inside. It was believed by at least one interviewee that a “Kilburn” in 1994 would have brought about a more immediate process of change.

The change to out-sourcing created problems in terms of maintenance of quality standards.

*“It’s just that I know the standard ... from contractors is not like the standard our own guys do”*. The interviewee went on to recount the work of a contractor who though performing a “basic” job was not used to the way the job should be finished. Typically by the time problems had been picked up the contractor had left and been paid and the time and cost of rectification was born by ETSA. Even basic trades may have specific standards of performance that need to be included in the contract and monitored. *“I think the supervisors are so stretched within themselves that they cannot be there at all times and they cannot watch the contractors”*. Another employee was concerned about the lack of communication that may occur particularly with safety issues: *“Contractors are a concern and a big concern was*

*that ETSA was going ahead introducing all this stuff and all our formal communication barriers had dropped*". There was no clear way to communicate to contractors exactly what they were required to do on site to maintain safety.

A further problem of out-sourcing was the reality that employees losing their jobs could see contractors working with them - sometimes people who were their fellow workers only months before but now re-employed by a contractor. There was a new and unwanted experience for workers to be working alongside contractors doing the same task:

*"The introduction of contract labour into the workforce is another problem ... how you do that in an organisation where traditionally it has always been done in-house. And we've done some of that probably more successfully than others ... and people get nervous about that so to manage that in the future is a significant change"*.

#### **7.4.2 Teams**

The move to teams was a product of the time. In all, the concepts of team and teams occurred in 14 of the 18 interviews and came up 175 times. The term "teams" had clearly been integrated into the language of ETSA. However it was related to the "problem" of lack of employee involvement - the "leave your brains at the gate" attitude. The move to more self-directed work teams was designed to get greater employee involvement and harness ideas to improve the business. The removal of several middle managers increased the need for managing differently unless spans of control were to be increased significantly. So the development of teams can be explained by the need to expand the flow of ideas and organisational learning but had appeal to manage with less managers. One manager saw it as part of the change of culture of the entire organisation:

*"... I work more in the area of policy, philosophy and at the moment very heavily into best practices and changing the culture of the place*

*and setting up teams and trying to get these teams up and running and sort of breaking away from the old ETSA culture and even breaking away from my old ETSA culture”.*

There were problems. Firstly, employees had spent years under a traditional hierarchical structure: *“Employees were used to being told what to do and did not want the extra responsibility”*. Secondly, there were personality conflicts because staff were not used to working together. More outspoken members would dominate others, sometimes to the perceived detriment of the team. *“We had a situation where there was one strong personality in the group that was able to exert his influence over the group”*. So managers spoke of developing:

*“the right culture or the right motivation and you’ve got to have a team that’s cohesive, that are flexible and are cohesive as a team, and not that ... people can’t work as a team”.*

A third problem was the anxiety that resulted by getting employees to take more responsibility for the management of their operations. It was in conflict with the way they had operated in ETSA for many years:

*“The old cry is “tell me what to do and I’ll do it”. But we’re saying, no, we’ll tell what job you’ve got but you’ve got to work out what you do. You go out and talk to people and you make the decisions and we’ll provide the leadership and back you up and support. A lot of people found it ridiculous and a lot of people just won’t really get over it. So that’s another cause of anxiety”.*

There is no evidence of whether the “old cry” is real in the mind of workers or if it is in the mind of management.

The implementation of teams could not be an immediate change. Both managers and workers needed to learn together how to implement this new approach. There

needed to be a slow change to attitudes as increasing responsibility was passed to employees:

*“We were wrong in thinking we could implement legislation, everybody is equal - self directing teams overnight. All the books say 5-7 years. We’re only probably 3 years into it at the moment. We’re about half way there I think before we get into self directing teams, a true self directing team. But the people certainly know that they have a lot greater say in what goes on. ... we’re always trying to encourage them to make decisions, they make the decisions on who represents them on certain project teams, we do that as a matter of course now all the time, ... So I keep bouncing that responsibility back to them all the time and its coming. It’s been habits for a lifetime for them as well as me and so we’re changing and were certainly getting there”.*

Some managers were taking the development of teams very seriously. It was sometimes easier to bring in a team based approach amongst professional engineers or technicians who were much happier to be autonomous and share the decision-making:

*“Yes. Probably I’ve got one of the longest histories here of running teams. As I’ve said, I’ve got the two teams. They have team meetings ... we’ve documented that over a number of years now so we have team minutes and they meet regularly and we have a code of conduct and things like that for the teams. The team up [stairs] here because it is a very high level, generally sort of tertiary educated group have sort of slipped into that mode of working very easily because by nature they are able to make their own decisions and to be innovative....*

*The formerly foreman led trade group that I have downstairs has been a greater challenge. We’ve been through fairly dramatic ups and*

*downs with that group and that's going fairly well at the moment. When we first started on it, the foreman that was there was appointed to another position and so we moved very quickly into saying to the guys from now on you are a self-directing team. And they were not ready for that and we did not give them adequate training, adequate support and it was all a bit of a disaster. I backed off a bit on that now. I was fighting very hard originally to suppress the emergence of a natural work leader in the group and push very hard towards, 'You are equal in the group and everybody does everything as part of their task'. I ended up giving that away because it just wasn't working ... Now we're sort of at the leader driven stage of self-directing team development. While I don't have a formal team leader, we do have one person that is the spokesman for the group".*

So the shift to team structures was an evolving process, in line with other initiatives to change the culture. The team-based evolution was interrupted by the departure of many of the managers who were making it happen. Even worse for the idea of teams was the destruction of many teams as key members of their group took a package and left the Department.

### **7.4.3 Best Practice**

The best practice program was launched in 1991 by Robin Marrett to encourage the innovation and the generation of ideas for new work practises. One manager expressed his belief that best practice was what they had always been doing - finding the best way to do things, without the “fancy terminologies”:

*“We were involved in best practices and some of our practices we had yesterday have now been changed or modified. But in the design department ... we believe we have always been in the era of best practices ... If you are out on a construction gang, for example you use a 100 ton crane to pick up a transformer and shift it, and then next*

*week you find out you can do it with a 60 ton crane that's fair enough, but that's a big physical thing to do. Whereas in the design department we were always looking for methods and ways to streamline or improve what we do and because it's if you like within our own control it's very easy to do. ... it was always a bit of a laugh and the philosophy of best practices was introduced from the point of view of design that we've always practised that. Its just we've never used the fancy terminologies. Officially since the best practice ... we've partaken in that and yes we've improved and changed some of the things we do to follow along with that".*

There was some commitment to keep best practice program going:

*"The role I have is to make sure that some of those things happen, like the issues that are raised by the people from the floor and they have some ideas that need some work on or needs approval or needs some report prepared..."*

Two managers expressed concern about the effort required with best practice, only to see best practice effectively removed:

*"I mean we've been through a best practices exercise and we've been through lots of things. They have been but a lot of money and training was spent and its up to the branches to push ahead with it if they want to. Some are really going with it and others aren't doing much about it".*

Ken, a shop floor tradesman, was disappointed that the programme died.

*"... we spent an awful lot of money getting there and a lot of really good things came out of best practices, but it got tossed out of the window ... and it was one of the best ways of improving productivity".*

#### **7.4.4 Strategic Cost Management**

This was the public name of the activity based costing project, an initiative within just one division of ETSA. As previously described, it was a response to change and came out of the work being done by consultants on a new organisational structure. In the minds of the staff of the Department it was directly connected to the need for survival and therefore the proof of the viability of the Department. The importance of financial viability and cost competitiveness were discussed in section 7.3 in relation to the concept of survival. The activity based costing or strategic cost management project was to provide the information to achieve this:

*“...we would have to be competitive and that is when strategic cost management reared up”.*

#### **7.5 Activity Based Costing for Resistance**

As pointed out in chapter 6, the implementation commenced because a firm of management consultants working on a major restructuring project advised the division's manager to implement ABC. At that point the consultants had no experience of implementing ABC but believed that it was a good approach to managing the division.

The other view found amongst lower level managers was that it was just another system which happened to be the “flavour of the month” and:

*“Whether I'm interested or not, I've seen many of these systems come and many go over the years. The flavour of the Trust (it's unfair to say a particular manager) at a particular time, depending on what influence ... they go down a particular path, and follow a particular, in this particular case, dollar based systems ... so you see them come and see them go”.*

This level of cynicism counter-acted the beliefs of more senior managers that ABC would be widely accepted as a rational approach to management.

However it became clear that the managers in the Division had come to believe that the information obtained from the ABC project would be useful to resist the changes being forced upon ETSA. The Division was under particular threat as a service provider with no independent alternative income. During the initial interviews many interviewees made statements about the threat that they felt under because of the potential out-sourcing or privatisation of their area:

- *“Our survival will be dependent on doing what we do well, and they see that now”.*
- *“Our major threat really is competition.”*
- *“It means that we've got to become competitive with people who might do the same sort of thing. There are not a lot of those in a specialised field but we certainly have to recognise it as possible. That somebody could take over and do the work we are doing...”*
- *“plus the threat, if you like, of certainly commercialisation and possibly privatisation.”*
- *“... if we're not competitive, see you later Fred you no longer here”*
- *“ can (we) go out there and run a successful business in competition with established private companies” ... “the real crunch will come when its an open market and we're tendering for work”.*
- *“if we aren't competitive then we're going to lose jobs ...”*

- *“We are all aware of it and know what the situation is and if we don’t compete we could be in very difficult situation.”*
- *“Yeah well that’s right because otherwise if we don’t we will lose the job and we won’t exist ... its difficult with some individuals because they’ve been here a long time; and they’ve been used to an older work speed. ... so we’re trying to impress on those people that they need to be doing a bit more otherwise there might not be a job there for them in future.”*
- *“But now we really are aware that we must be competitive with outside contractors because they are waiting to come and do our work”*

These comments were made by employees at all levels in the Department. There was universal recognition that the future of the Department required being competitive with the market or going out of existence.

While the activity rates were primarily used for transfer pricing, they were also being used to benchmark against external organisations. Although the ABC results were not as sophisticated for bench-marking as the later project, they did provide some focus for action. Managers could use the hourly charge rate to assure management that they were comparable with outside providers and therefore should not be out-sourced:

*“And ... number one on the list is making sure that we are a viable, competitive unit that’s going to be able to stand up after all the wash has been and say yeah OK are we competitive, yes we’ve got our job because we are the lowest cost quality supplier of that product to groups within the organisation.”*

In this way, ABC was used to provide some defence against the perception that outsourcing was the ideal way to go for this section of the organisation. There was a

belief amongst some, that rational management systems would enable the organisation to mount a defence. If they failed to stop the push they would at least go down fighting:

*“If we’re not competitive, see you later Fred you no longer here. ... That culture has permeated all this way through this part of the organisation. But the other option isn’t particularly tenable in my mind which is you do nothing and we guarantee to be chopped off. At least if we’re in there and we can demonstrate we’re competitive, we’ve got half a chance. If, at the end of the day, people make decisions on other than an economic basis, I need to argue the point that we’re the most economic, we can provide the service. But at the end of the day they say “No, its going to go”, well there’s nothing much I can do about that. But if you go in there saying “Yes we need to remain but we’re uneconomic” well you are behind the race before you even start. So I see it as an absolute necessity, it gets you to the starting gate. It might not get you to the finish but it at least gets you to the start.”*

ABC was seen as a key aspect of this move to prove competitiveness:

*“so down the track we would have to be competitive and that is when strategic cost management reared up as well because that was vehicle for us to get feel for how competitive we may or may not be. It was never an issue for us before say ’91, so that’s an issue that’s been around for 3 years. It is becoming increasingly critical for us as the true open competition time gets closer and its only 9 months away at the moment ... trying to make sure the place is heading towards a commercial basis. We’ve got a long way to go with management systems and profit and loss statements and a true commercial outlook.”*

There was a feeling engendered by the ABC results that the Department was in fact cost competitive and would therefore be able to survive. For example:

*“Generally in our group we seem to be very competitive on the first cut in our technical area.”*

The hourly rates for this group were better than or equal to those available from private sector organisations. This provided some confidence that the group would be worth keeping. Using the ABC data another section said:

*“At this stage we are quite competitive ... we have had quotes from the private area for various workshop jobs and our quotes are cheaper”.*

A further example of the use of ABC data:

*“I believe there has been some studies done to compare our costs against outside and my understanding is at the moment we’re quite favourable”*

There was quiet confidence that many areas and services were cost competitive using ABC information.

There were some that were looking for ETSA not to reduce in size but to expand as it was given the opportunity to take on other players in the service provision market. This required substantial changes to both the legal arrangements and the attitude of the State government to the role of the public sector.

The quotations above suggest confidence in the survival of the Department and the usefulness of ABC for rational development and improvement of the Department. But three months later after these interviews, in June 1994, there was an exodus of staff from the division who had taken voluntary separation packages. In 1995 there were further attempts to reduce staff. With the departure of the staff there was a significant winding back of activities. ABC failed to produce gradual change and development as had been promised in 1991.

The process of out-sourcing continued. It appeared to be driven by a general belief of the board and the State government that it was a superior way of running the business. The hourly charges which came out of the ABC system were useful to justify internal efficiency, when they were benchmarked against private contractors. Staff were keenly aware of their hourly rates. However the hope that rational decision-making might prevail were dashed by the forces for change, which were so great that significant reductions in staffing and the contracting out of services continued regardless of those hourly rates. The forces included the ideological commitment to out-sourcing by the State government, the pressure to reduce staffing to achieve national efficiency goals and the cost reduction necessary to achieve State government targets.

As a mechanism for justifying the existence of the organisation, the ABC rate per hour was technically inadequate. Although the rate of each activity could be compared to the market, the determination of the quantity of each activity to be used for a project or service (the bill of activities) was not accomplished. The subsequent benchmarking processes brought in both hourly rates and the hours to be used and was much more effective in reducing the process of destruction of the Division. This perhaps raises a broader issue of the use of ABC in service organisations where there are non-repetitive outputs.

## **7.6 The Role of ABC in Promoting Change**

At the same time as ABC was producing a means of rebuttal of external changes, it was also being used to create a new climate of efficiency amongst the staff of the Department. Several managers and accountants argued that the ABC implementation had produced a change in culture in the organisation. Even when ABC looked as if it was faltering, there was at least some pleasure from some sections of the organisation that ABC had been an important change agent. ABC had helped achieve a new strategic direction: *“that you’ve got some sort of idea from a strategy point of view where to attack your costs and where to develop your strengths”*. An old culture had been replaced by a more managerial culture. The concept of “one

happy family” had gone. This was the only area of the organisation decided to use ABC as one of the approaches to producing this change of culture. A further research question remains as to whether the particular change agent really matters and whether alternative approaches were more or less effective.

The ABC system contributed, however viewed, to the change in culture. There were some changes in practices because of the use of ABC information. The cost of repairs had become more visible so that better decisions could be made about repairing compared to replacing with new. In the worst case, repair costs of a part were reputed to be double the cost of the new purchase price. Section managers believed that it had impacted on decision processes. For example one said:

*“we had lines of business that were costing us \$500 an hour to provide and we’d sort of said why is that? and it’s because we’re doing it too infrequently or whatever we’ve changed the way we do those things so that those costs were brought back to the normal rate of around \$40-50 an hour.”*

The hourly rates were benchmarked against external organisations and staff were reviewing the benchmark hourly rates to convince their staff that radical change was really necessary. ABC therefore filled a niche, in a time of rapid organisational change, to defend the status quo to senior managers while urging the employees to improve productivity.

Supervisors did suggest that once staff knew the cost of their time was \$50 per hour they would be much more conscious of going out to find parts or spending time just talking. Ken, one of the shop floor tradesmen said:

*“We are aware of costs ... and what it costs an hour to have us on the site. If we are sit around for two to three hours the costs go up. Yeah, we are aware of the costs of us being there”.*

I ask: *“Do you think all the guys feel like that?”*

Answer: *“I’d say most of them. Yep.”*

However, my discussions with the employees performing the operations suggested that this obviously was not universally true. Some were not really interested in saving money and there was no real threat of being sacked, so they could not see any point in saving money.

Some activities were now too expensive for the Department to provide. Instead they showed the internal customer who owned the asset how to maintain it. This saved ETSA money and improved the profitability of the Department. In general, less maintenance was done because there was not the time available to do it in the same way.

Those changes had involved looking at the use of particular resources, like the use of vehicles, plant and accommodation costs. On one project, \$38,000 had been saved on accommodation costs. Instead of all the accommodation bookings being done at Head Office, the supervisors who planned the work could work out the best place to stay to maximise the work output. Alternatively, they were allowed to schedule overtime so that their workers could come back to Adelaide where they lived. This type of cost consciousness was contributed to by the costing of lines of business using ABC.

ABC made managers conscious of non-productive time and the need to increase their engineering involvement and decrease their managerial involvement to increase the percentage of chargeable hours up to “international best practice”. However some people were not using the ABC information. In response to a rhetorical question, *“So you certainly don’t use this information as part of your management?”*, the response was: *“That’s for darn sure. That’s clearly obvious from what I’ve said.”*

Another impact of ABC was actually getting rid of lines of business in which some managers believed the organisation was not competitive: *“So we’re trying to get out of that line of business. One of the reasons that was reinforced is as the activity based accounting.”* There was some real evidence that the organisation would not have divested itself of these activities without ABC.

While there was a belief that ABC could bring about a new pattern of thinking and decision-making within the Department, there was also a strong belief, at least in the minds of managers and some supervisors, that ABC could be used as a defence mechanism against the moves to wind back the Department even more, and outsource its activities. There were even some that hoped that in a rational system they might be able to expand the level of services because the activity based information proved how cost efficient they were. While hopeful about the ability to use the figures, there was also the sense of political reality that decisions may be made that were not based on any rational analysis.

## **7.7 ABC and its consequences**

The expectations that ABC might help them survive did not eventuate. Although the Department existed in an emasculated form, it was basically hollowed out in terms of its technical capability and human resources.

*“... We’re down to 4 people on the workshop floor now from 110. We’ve survived all the way through but that’s been a plus for the firm because they could have shut us down. That’s a good thing that we’ve been kept alive”.*

Here was some conviction that they had beaten the odds by just surviving in some firm – but 106 jobs, nearly all of the jobs, had been lost in the process. The functions had survived but the people had all gone.

The problem for the Department was that the numbers that mattered to the senior managers were not the calculations that proved that they should survive. The numbers that counted were the staff number cuts that senior managers wanted to be able to prove to the State Government that they were becoming smaller, more competitive and giving room for the private sector to be involved in what was historically a public sector activity. The accounting that mattered was heads, not dollars.

I have shown in section 7.5 that the ABC system basically failed in the objective of stopping the reductions in services supplied and staff cuts in the Department. The political imperatives of staff cuts was just too important to be halted by rational cost justifications. The cutting of staff forced the out-sourcing which was in line with the direction of the State Government. As a quotation previously used in this chapter suggests:

*“Yes, that’s the biggest problem - lack of resources. See everybody left but the work didn’t go away. So what you do now is out-source your work. But who can say you can do it cheaper with a contractor. That hasn’t been proved yet has it but they forced us into that position or they forced ETSA into that position by getting rid of your numbers. Work hasn’t gone away ... still there but there’s no resources to do it”.*

## **7.8 Conclusion**

This chapter has provided an inductively derived model of the development of the ABC system. This model was tested on members of the Department in the second round of interviews in 1996 and 1997. It made sense to them in explaining their behaviour in the early 1990s as they took actions for what they believed was the good of the Department.

Central to the whole reasoning was a desire for survival. Survival could come about through resisting the pressures for the Department to be wound back. This could come by using ABC data which provided the evidence that the Department was as efficient as private sector providers and therefore should be preserved. There appeared to be no logical argument for the destruction of the Department, which is what eventually happened. Managers, supervisors, and technicians were happy to use the same ABC data to bring about change. This included looking at current work practices as well as divesting the Department of activities which were easily reproducible at less cost outside.

Despite the rationality of the actions taken, no accounting or system of reason could assist the Department to stop its dramatic destruction. Power relations meant that the voice of senior management won. Even though at times they backed off when given the evidence, their general thrust was to keep cutting the staff numbers. By the end of my research, 75% of the staff in the Department at the start of the research had gone.

In the next chapter I move from the analysis of ABC as one of the tools of management and management accounting to explore the broader role of accounting during this period of significant organisational change.

## **8 Understanding the Role of Accounting During Organisational Change at ETSA**

In the previous chapters I have outlined the major changes in ETSA and the role and history of the ABC system. I have so far concentrated on ABC in the context of an organisation, and shown how ABC both shapes and in turn was shaped by the organisation. I have developed an inductively derived “model” for explaining the development of ABC and demonstrated the incapacity of ABC to meet the expectations of members of the organisation. One of the criticisms of such approaches including grounded theory is that they can lead to the development of a range of shallow theories which have no integration and provide no linkage and, therefore, no increase in depth of understanding of the area. This includes Layder’s criticism that grounded theory must be connected with other theory to build a cumulative body of knowledge or otherwise “grounded theories will be relegated to ‘respected little islands’ of (mainly substantive) knowledge separated from others” (Layder, 1993, p.44). In this chapter I turn from the specific to the broader role of accounting during organisational change, and link this to the broader literature discussed in Chapter 3.

### **8.1 Theoretical Triangulation**

There is a problem in using a particular research framework from chapter 3. Researchers from different epistemological and ontological positions tend to talk over the top of each other, not usually willing or sometimes apparently even able to share their perspectives and findings in the same area of research. In this chapter I attempt to “listen” to the voices of different researchers of accounting and organisational change. This is consistent with the argument of Hoque and Hopper (1998) that theoretical triangulation will enable researchers to take advantage of the complementariness of different theories and gain alternative interpretations of the same phenomena. They cite five studies where the researchers have used up to four different theoretical frameworks in the one management accounting study.

In this chapter I will move to view ABC as one element of a broader range of accounting and management approaches in a time of rapid organisational change.

## **8.2 Analysis from Laughlin's (1991) framework**

### **8.2.1 Applying Laughlin's framework**

The most appropriate way to use Laughlin's model, from the perspective of my research, as a macro-level model of ETSA as a whole. As the Department did not exist until 1991 there is insufficient time to trace change (Hinings and Greenwood, 1988). Also the Department had not had time to develop an independent interpretive scheme before it started to be wound down. However I do refer to the Department in the discussion below because it is the only part of the organisation I have sufficient information about to draw credible conclusions.

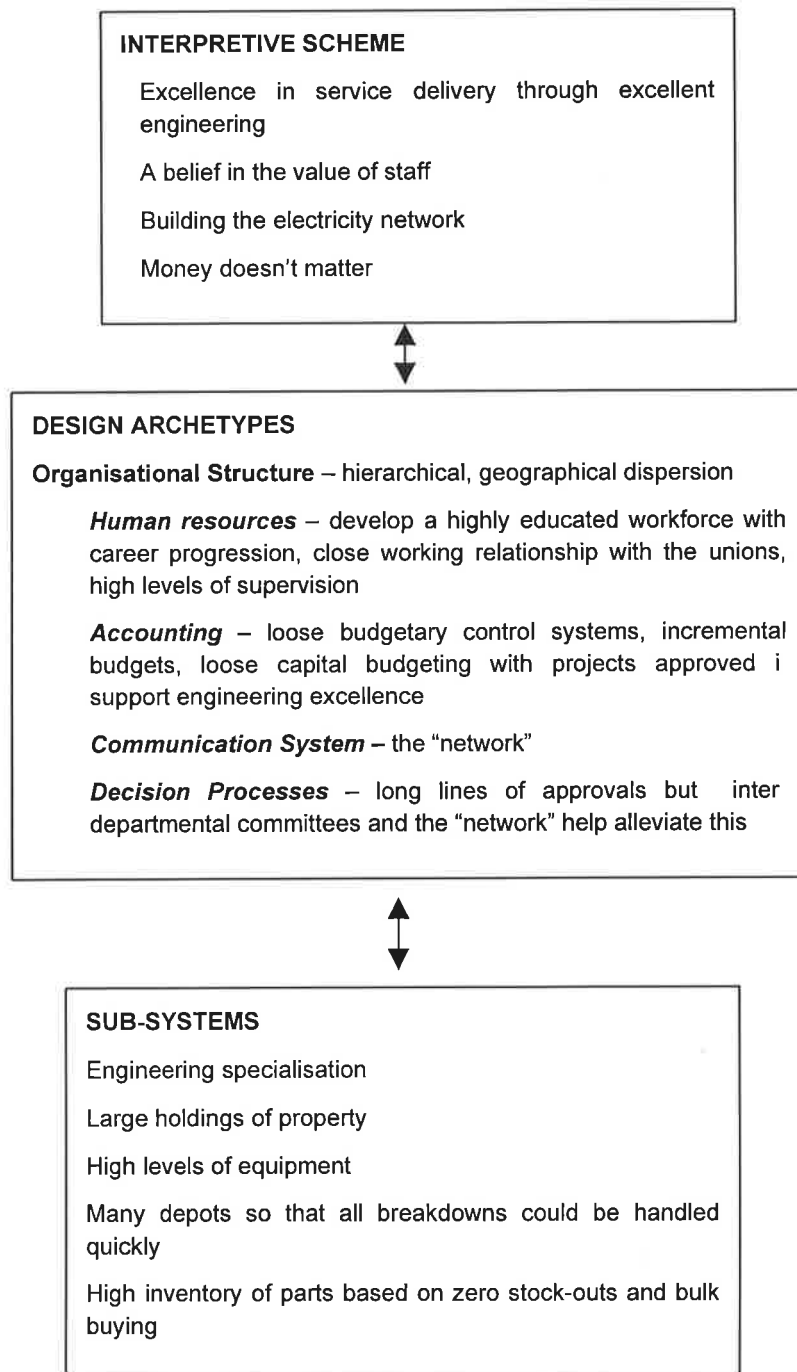
In applying Laughlin's framework I have firstly developed an organisational model of ETSA in the late 1980s which is Figure 8.1. The dating of the model relates to the first kick that I wish to consider in the late 1980s. The sources of the model are from academic sources, Linn's history and the interviews and data that I have collected. These sources are detailed in chapter 5. As with Soin (1996), I have found difficulty in splitting the interpretive scheme of the organisation into meta-rules, mission, and beliefs and I have merged them into an overall view of the interpretive scheme. The main part of the interpretive scheme comes from the "old culture" as detailed in section 5.3. However I have not included the "family" as part of the interpretive scheme because it had probably already started to break down before the end of the 1980s.

As Broadbent (1992) suggests, it is difficult to divide the design archetype from the interpretive scheme. The features of the design archetype have been described in chapters 5, 6 and 7. The communication approach through the network was very important to the maintenance of the organisation through lateral relationships. At this stage accounting was not a critical part of the design archetype. As the

interpretive scheme focused on growth, engineering excellence and people, accounting was not crucial to the organisation.

In the mid-1980s there appears to have been balance and coherence, between the interpretive scheme, the design archetype and the sub-systems. This is what Greenwood and Hinings (1988) call “archetype coherence“, where the structures and processes reflect and reinforce one another. However, there was clearly pressure for change. “There was a belief, among some at the upper level of ETSA, that a change of large proportions was required.” (Linn, 1996, p.216). The existing situation was not tenable, especially once the state government believed in change: “In early 1988, it was the Government’s view, also, that the time had come for a change in direction” (Linn, 1996, p.216).

In fact the Chairman in 1990 saw the change as overdue: “One of the pressures on ETSA now is that this past degree of insulation from change is no longer, permissible, practical or just, and the call to greater accountability is coming concurrently from all parts of the community including government, business, and academic analysis” (as cited by Linn, p.225). The Marrett Kick was the response.



*Figure 8.1 A model of the organisation at the commencement of the research*

### 8.2.2 The Marrett “Kick”

This kick which brought about the first stage of change at ETSA was prompted by the five factors identified by Patrickson<sup>17</sup> which led to the appointment of Robin Marrett. The kick that Robin Marrett brought in some major changes to the interpretive scheme as seen in Figure 8.2. The focus switched from engineering excellence and reliable supply to profitability. Although there had been focus on the customer, there was increased focus on the customer, and the concept of the internal customer came into play. The development of the Blue Ribbon customer service training was a sign that there was perceptual change to an even more externally focused organisation. The bad publicity relating to Ash Wednesday brought a need to build a better relationship with the public (Linn, 1996).

There were also clear changes in the design archetype. The decision-making structure that was based on a close working relationship between management and unions broke down. A union based culture was seen as in conflict with the role of profit-making. It is claimed that a senior manager of ETSA encouraged his subordinates to go out and “have a fight with the union every day”. This was a significant change from the days when the unions and management would sit down and assess workers career paths. Working conditions were seen as too generous and incompatible with the new culture and hence needed to be changed.

I have already discussed in section 6.1 the change in the accounting systems which were part of the design archetype. The shift to budgetary control was a clear change in an organisation that was moving to financial calculation as a means of control. The end of the bottomless bucket of money had arrived.

One of the most dramatic changes that Marrett brought in using accounting was the shift away from budgetary appropriations as a means of control to a system where

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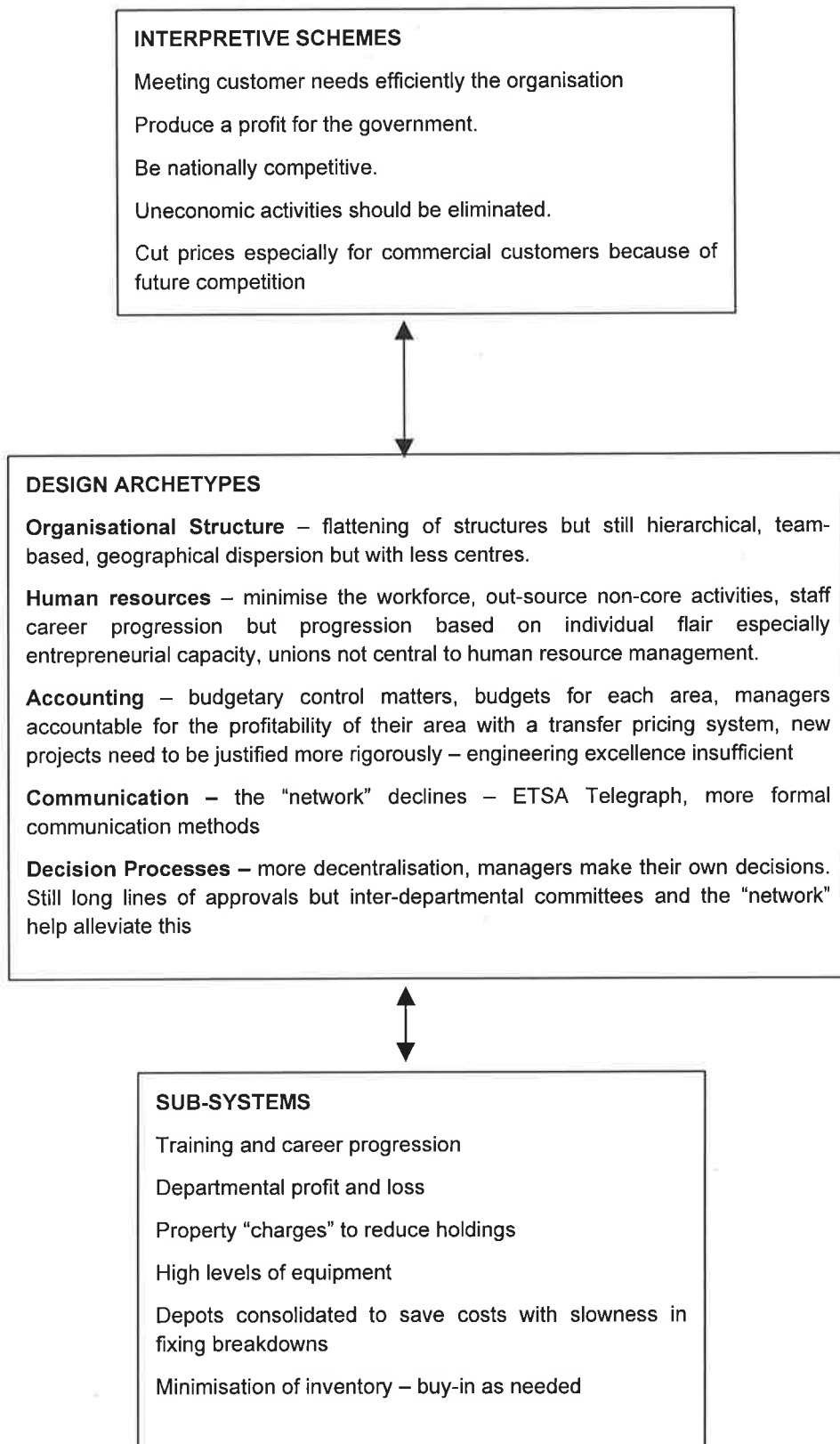
<sup>17</sup> Listed under section 5.2

each section had accountability. This was achieved through the development of the transfer pricing system, as previously explained in Section 6.4. Accounting was used as part of organisational change. Unlike the previous studies using the Laughlin framework, the participants in the change process saw this as positive, at least those interviewed in the Department. The conclusion in Section 3.1 that employees may inadvertently use the new accounting system and hence colonise almost by accident does not appear true from the perspective of those in the Department, although those in other areas of ETSA may have different beliefs. The staff of the Department above shop-floor level, mainly engineers and technical people, were generally positive about the role of accounting.

There did need to be more concentration on profitability<sup>18</sup> if the organisation was to survive. A supervisor, who later left the organisation and became a senior union official, was pleased about this change. Rental expense was notionally charged to each area and this gave an incentive to rationalise floor space. This heightened understanding of cost provided motivation for the Department to become more efficient and therefore more likely to survive. The control of costs such as floor space made it more likely that jobs could be retained, as capital resources were shed rather than labour. This process was supportive of workers rather than against them. Again this perception may have been unique to the Department, which was a service provider.

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<sup>18</sup> This meant for the Department a reduction in operating costs, given that output was likely to continue to fall.



*Figure 8.2 ETSA after the Marrett changes*

The development of an ABC system in the Department was a change in a local design archetype which was consistent with changes to the interpretive scheme of ETSA as a whole. The push for the elimination of inefficient sections of the organisation meant that the role of accounting in “making visible” was important. Activities that were uneconomic were exposed. Using the rates that came out of the ABC system it was clear that meter repair could no longer be justified. It was far cheaper to throw meters out and buy new ones. ABC data was also used in benchmarking of performance against external providers of services, hence establishing the long-term viability of ETSA internal service providers. The ABC system was, therefore, not viewed negatively as forcing change and hence had few of the negative views identified by researchers using the Laughlin framework as explored in Section 3.1. This result is more consistent with the research performed in private sector organisations during change (Soin, 1996; Richardson, Cullen and Richardson, 1996) than it is of the public sector organisations (eg. Broadbent, 1992).

Given this change of design archetype and the interpretive scheme, there has been second order change. The question remains whether this was colonisation or evolution (Laughlin, 1991). Although there were concerns about some of the changes to the interpretive schemes, most staff retrospectively appeared to support the change as necessary for the future of the business. There were aspects of the change that employees were unhappy about but they saw the need to change and looked back at the previous culture nostalgically rather than feeling any bitterness towards the new interpretive scheme. In this respect the views obtained in the Department may seem on the surface to contradict the views of Linn (1996) who reflected on some negative impressions of the Marrett changes: “people believed that the restructuring was not handled as compassionately as it might have been” (Linn, p.221). However, Linn (1996) does suggest that Marrett did his best to manage change and did bring about profound change.

One of the problems in delineating colonisation versus evolution was the schizoid culture. This was not evident to me as between areas of the organisation, as I did not

have access to the other sections of the organisation. However, the differences were evident in the Department between levels in the organisation. Base grade manual workers or trades people were more hostile to the change in culture. While the managers and supervisors showed considerable agreement with the change in the interpretive scheme and the design archetype, and changed the sub-systems to match, there was incomplete buy-in from workers at the “coal face” who were not really won over to the new culture and belief system. The throwaway line after a meeting at which Ted delivered the corporate planning document was “ b... economists” - a conception that the organisation was driven by the economic rather than the interests of the customers or the employees. Linn reflected on the uncertainty and perplexity that workers experienced.

Another area in which the employees really did not “buy in” was the idea of employee empowerment and team based operations. The supervisors and managers in the department were still concerned about the “leave your brain at the gates” approach, whereby workers wanted managers to take the lead in planning and directing work and just wanted to get on with doing it. This view was confirmed by conversation with workers.

It is therefore difficult to establish whether there was colonisation or evolution. Staff at the top six levels of the organisation including many of the technical and administrative staff might perceive it as evolution. The “labourers” and semi-skilled workers may well view it as colonisation. This interpretation is supported by the ABC experience. The managers, supervisors and technical staff saw ABC as almost an automatic development of where they were going in terms of the objectives and culture of the organisation. The design archetype followed the interpretive scheme without resistance as expected in evolution. These same managers and supervisors saw ABC as useful for changing the culture, thus using a design archetype to change the interpretive scheme – consistent with colonisation.

### **8.2.2 The “Government / Armour” Kick**

The next jolt in the organisation was connected with the election of the Liberal Party and the subsequent appointment of Clive Armour. It is very difficult to establish a model of ETSA after this time because the organisation started to be broken up. Figure 8.3 represents a best attempt. From the standpoint of my research in the Department there appeared to be a complete lack of coherence between interpretive schemes, the design archetype, and the sub-systems.

At the design archetype level, the reduction in staff meant that the old communication networks started to break up. This had held the fabric of the organisation together and now there was no clear way to co-ordinate operations from the Department’s view. This break-up was partially the result in the massive departures from the organisation, which meant that many of the experienced people who were part of the network were simply not there any more.

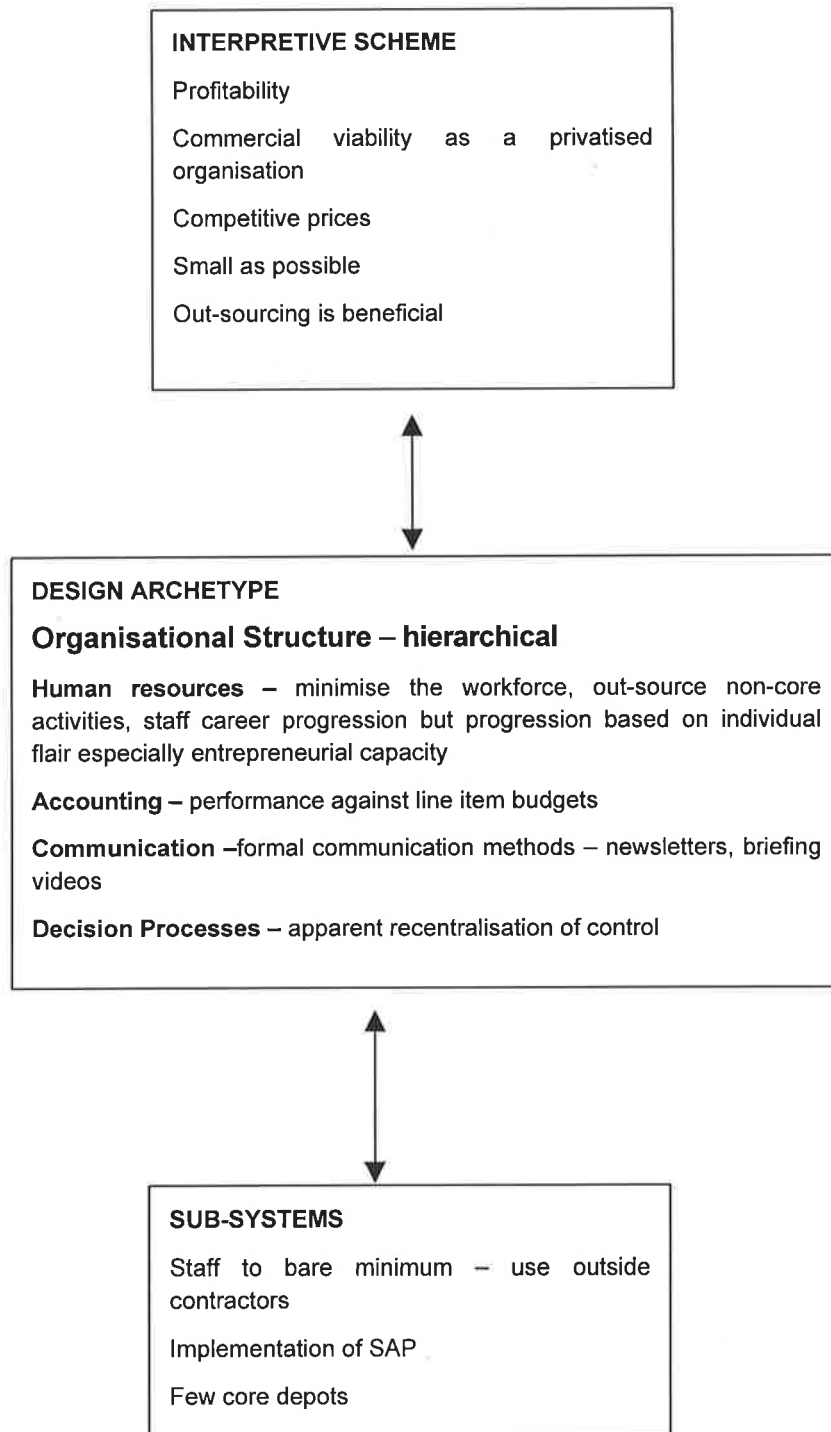
The change in the accounting systems left staff perplexed as to how to they were manage. How would they know whether they were meeting financial targets? The system of divisional accountabilities was consistent with the new interpretive scheme developed by Marrett. The abandonment of that approach, and the shift back to tight budgetary control as the sole form of financial accountability was inconsistent with an organisation that was moving towards profitability and customer service as a corporate entity. The decision structures based around hierarchies and long lines of approval, as identified by Linda, was also inconsistent with the interpretive scheme. Human resource practices theoretically continued to be based around job description and person specification, whereas people went on doing the jobs they thought they should do irrespective of any formal job title or description of duties. The design archetype was not matched by the sub-systems.

Accountability to parliament in relation to spending on credit cards was also inconsistent with the business view of the organisation. In general, there were a

number of managerial systems that were inconsistent with the general view of the interpretive scheme.

The dominant message that workers appeared to be hearing was that ETSA needed to become smaller in terms of staff numbers. Superficially this may appear to be consistent with the new interpretive scheme following Marrett, but now it seemed to some workers as if it was small for smallness sake. This was inconsistent with an interpretive scheme that focused on profitability and customer service. The policy of gearing up to handle only the basic business meant that in times of peak demand for repair crews or support staff there must be insufficient capacity and hence a degradation in service. Sub-systems appeared to be inconsistent with the understood design archetype. The mass departures from the organisation in June 1994 brought about such a lack of resources that the previously held interpretive scheme could not work. Those who could see this coming decided to leave anyway.

In addition, decisions to out-source did not appear logical. There was a clear belief in the minds of some that ETSA placed a priority on outside firms. This resulted in dissonance, as it was clearly contrary to the historic interpretive scheme and the new interpretive scheme that had been developed under the direction of Marrett. Some staff were particularly angry over the award of a construction project for a new sub-station without giving internal staff an opportunity to bid for the contract. “Kilburn” became notable to some as a symbol of change in the organisation.



*Figure 8.3 ETSA after the rise of the Liberal Government*

The sub-systems reflected some of the continuing changes in the interpretive scheme and design archetype. The implementation of SAP consumed significant resources, involving up to 70 staff over six months. The move to a large enterprise resource package was consistent with a move to centralised control and away from the previous decentralised accountabilities where managers were given the opportunity to manage the resources they needed.

There was confusion in the minds of managers at all levels as to what the interpretive schemes were and what design archetypes were. This problem was also a result of the potential break-up of the organisation, and hints at privatisation. Both became an eventuality in subsequent years.

### **8.2.3 The Absorbing Group**

The role of an absorbing group has been a feature of the previous research. The Marrett “kick” resulted in a “micro-restructuring” process, which involved an interdisciplinary team looking at proposed new structures. This was a colonising group not an absorbing group. The managers, who received the recommendations, generally accepted the changes and also played the part of a colonising group.

The Liberal Government / Armour kick brought about the formation of absorbing group within the Department. I have no broad information across other Departments. During 1994 the managers attempted to act as an absorbing group to the continual reductions in activity. They resisted the moves for the Department to become smaller and allow its functions to be out-sourced when it was more economical to keep the function in-house. However when packages were offered in 1994 most of these people took them. This group which could have offered resistance left the organisation. Although Ted continued to “fight on” he misjudged the political situation and was removed himself. At that stage all the absorbing group were gone. The manager of the Department after Ted was perceived by workers as a “lackey” of senior management – he had no credibility to form an absorbing group against the changes. Others who viewed him more kindly believed that he did not have the

strength to resist. He was in turn moved on to other projects and an acting manager put in place. Throughout this time the continual down-sizing and destruction of the technical base of the Department continued. There was no group who could act as an absorbing group to resist the level of change.

## **8.2.4 Conclusion**

The model of an organisation with interpretive schemes, design archetype and sub-systems with tracks of change provides a useful heuristic to understand organisational change. However, the practical difficulties commented on by Broadbent (1992) and Soin (1996) became clear when I came to use the model at ETSA. It was helpful to move beyond the description in Chapter 5 to a framework which enabled me to explore the various states of the organisation. The explanations given here are limited in that they come from the perspective of the members of the Department and those of other researchers. In addition there is a problem of seeing the organisation as a whole – the Department may have had a unique interpretive scheme and some parts of the design archetype may have been unique.

It is important to now compare and contrast what happened at ETSA, and specifically the changes in the Department, to the conclusions reached in section 3.2.3:

- Although first-order change is a likely outcome of a change programme, the changes in ETSA went further. Many organisational participants were unwilling to protect the core because they saw it as unsustainable in the face of the national and international changes.
- At ETSA, and in the Department, there appears not to have been an absorbing group. When the Department was under critical pressure to give up its core as an efficient service provider, the managers who could have acted as an absorbing group left. There are likely to be some who see the changes as reform and push to colonise the changes.

- The third conclusion from 3.2.3 appears to be replicated. “Colonisation can happen with pressure from the top of the organisation. The very nature of the reforms may be such as to make it difficult for absorbing groups to resist the changes”. Both Marrett and Armour were appointed with a mandate for change. Whereas Marrett found many senior managers saw this as necessary, Armour made internal appointments and especially brought in “outsiders” to colonise the changes.
- The fourth conclusion was that accounting systems can enable change; for example bringing about a cost or profit culture from a professional culture. This is mildly supported in the “Marrett” kick, although it is hard to be certain whether the change in culture at most levels of the organisation did not precede the change in the accounting system. Accounting succeeded in some ways to change the culture at the lowest level of the organisation, although there was no prevailing sentiment that cost mattered. The changes by Armour disrupted any ability to bring change through accounting, as there was no longer any clear idea of which accounting metrics they were being asked to achieve. The dominating accountability became numbers of staff and not dollars.
- The involuntary imposition of a new design archetype in the form of accounting systems was to some extent achieved, as all employees of the Department had to use the hourly rates generated by the ABC system to transfer price their services. They in turn were being made conscious of the cost of their time and forced to think about the cost of their services compared with outside suppliers.

The overall conclusion is that accounting is not infused with the negative connotations which it received in prior research. Accounting was either viewed as a positive contributor to change or was seen as not relevant to the changes going on. Accounting generally responded to the interpretive scheme rather than being a driver

of it. In circumstances where accounting has a predominantly positive role there is not likely to be an absorbing group.

An important issue arises here as to forms of accounting. As has been shown in Chapter 7, the dominant accounting was not dollars but in numbers of people. This feature of the interpretive scheme of being “as small as possible” was seen in the design archetype of constant down-sizing. No absorbing group formed against this change.

### **8.3 Analysis from Boundary Maintenance**

The concept of boundary maintenance is useful for understanding the general changes within ETSA and the changes in the Department. The boundaries of ETSA as a whole were set as a public sector entity which accounted for its result through a board appointed by the government. In the 1980s it was only loosely accountable to the State Government. Accounting really did not serve as a binding structure. The fabric of the organisation was the network, a network established by the rotation of employees around the organisation until they knew each other and had a relationship of trust. The whole organisation could be run by these networks.

When the Department was formed, it was left primarily to Ted to establish a boundary around the Department. His goal in 1994 was to establish a boundary so that it would be seen as a parcel of technical capabilities and either kept inside or sold as an entity to an external party. Accounting did become useful both as establishing the boundary and as a binding structure. The creation of a Profit and Loss statement for the Department distinguished it as a separate entity and not just as a service centre within a much larger organisation. It gave it a credibility as part of an organisation that deserved to exist. This was important to its manager so that the Department could be preserved whatever happened to ETSA as a whole. The problem for Ted was that the Department was a collection of functions that did not have absolute synergies and that under another structure could be moved out to another area. It was also abundantly clear to Ted that not all of the sections could be

proven to be competitive with outside suppliers and that these parts may need to be sacrificed to keep the whole. There was no voice of protest to this even from those whose goal was to protect the jobs of employees. They wanted to keep the jobs of their fellows but not at any cost.

This is where ABC had a role in boundary maintenance. As a transfer-pricing tool it clearly delineated the borders of the Department to the rest of the organisation. It created visibility about the outputs of the Department and how it met the needs of other areas of the organisation. It created this visibility in the mind of the employees who now could see that it cost \$x per hour for their service and they needed to provide value to the next department in charging that rate.

As a binding structure it brought focus on what could be justified as part of the Department in the longer term. It also helped create some solidarity of vision to build a profitable service network. It was accounting that helped to delineate what should be held onto uncompromisingly and what could be dispensed with.

These conclusions are consistent with Jacobs (1998) whose research also found that a group of GPs could be satisfied with accounting measures inasmuch as they provided a binding structure. Just as the visibility experienced by GPs was not initially unwelcome because of the possible benefits to patients, so the ABC system could play a helpful role during organisational change of providing a visibility that could enable positive change.

It became clearer over time that although activity-based costing did fill the role of a binding structure for the Department for the short-term, this was not true as time went on. It is hard to identify a binding structure as the Department slowly broke up – its activities were out-sourced or re-located to other sections of the organisation.

Llewellyn's commentary (1998) on the two binding structures of caring and costing, can be related to the ETSA experience. In ETSA one of the traditional binding structures was engineering excellence; but with the appointment of Marrett cost and

profit became more central. The difference is that there was not the significant effort for boundary maintenance at ETSA, since there was a belief that there had been too much stress on the engineering. There was significant “boundary-work” to integrate engineering and profit. This is not surprising because I would expect less emotional and sympathetic attachment by engineers to engineering excellence as a binding structure than by social workers to caring (Llewellyn, 1998).

There is a factor that is more analogous to Llewellyn’s caring and that is “caring” for staff. Although “the family” concept had started to wane before Marrett, there was some continuity of the general feeling of care for fellow workers. The significant down-sizing threatened that binding structure. Although there was a willingness to let some people go, there was a genuine concern that people’s lives were being damaged by an unnecessary emasculation of the staff of ETSA. Distancing costing from this form of caring was not possible, staff cuts were inextricably bound up in the new costing binding structure.

In conclusion, the boundary maintenance idea is the framework that best explains the positive response to ABC by the managers and many supervisors in the Department. They were happy to have a binding structure for the Department while they believed that they had some control over their operations. In this respect there are similarities with the GPs in Pegasus (Jacobs, 1998).

## **8.4 Analysis from Structuration**

Whereas Laughlin breaks up change by jolts, Giddens (1984) saw changes as episodic. The two jolts can be seen as two episodes of change in the organisation. The first episode is the period when Robin Marrett was CEO. The second was the election of the Liberal Government in South Australia and the appointment of Armour. These two episodes assist the use of structuration. Both of these were at points of crisis and hence were periods when agents had influence to bring about significant changes to structure. The structures of ETSA and the modes of signification, legitimation and domination had developed from 1945 to 1988 and

reproduced through more than one generation of employees. This supposed stability gave no hint of the radical changes that would occur in the 1990s.

In examining social change Giddens (1984) identifies four dimensions of an episode – origin, momentum, type and trajectory. Although potentially useful, these dimensions may be more applicable for explaining macro level social change rather than short run changes in a specific organisation. To some extent I have explored “origin” retaining the issues of human reflexivity and not just structural conditions. In the next sections I look at the three structural dimensions of social systems: signification, domination and legitimation. The relative importance in the relationship of the three depends on the nature of the social organisation. Giddens (1984) believed that in an economic or political institution, of which ETSA would be an example, the relationship would be domination, signification and legitimation.

#### **8.4.1 Domination**

The resources which provide for structures of domination are of two types (Giddens, 1984) - resource authorisation and resources allocation. Resource allocation relates to the control of material resources whereas resource authorisation is the “transformative capacity generating command over persons or actors” (Giddens, 1984, p.33). While most stress may be put on control over the material, Giddens argues that authorisation may be more important. As an institution moves from political to economic there is a shift in domination from authorisation to allocation.

Under Marrett there was decentralisation of decisions relating to resource allocation. The establishment of quasi-markets through the creation of transfer pricing gave apparently more power to the supervisors to buy the resources they wanted. Resource use became more transparent. As with Macintosh and Scapens’ analysis of General Motors, this decentralisation cannot be seen necessarily in a lessening of domination – but a change in domination structures. Centralised power over resources was increased by profit and loss reports in each section. The ABC system was an important way in which the Department replicated this approach. It increased

the ability to more effectively understand resource use and performance in their sections, while providing a centralised control over resource allocation.

In relation to resource authorisation, this was still quite tight due to the continuing demands of the bureaucracy as well as supposed accountability requirements of the South Australian parliament. This seemed contradictory to supervisors and managers, who ostensibly had more power over resource allocation.

Under Armour, allocation of resources appears to have become more centralised again. Resource allocation did become more powerful as resources were reduced, although managers may have felt bewildered by moving back to control against budgetary targets. This system which existed before Marrett was revitalised in a much more powerful form. The previous budgetary control system was ignored because it did not exert any influence over organisational life as there was still plenty of resources. Under Armour the budgetary control system became a central part of resource allocation.

The importance of human agency is again critical here. One manager outside of the Department was devastated by the ability of a single individual to overthrow the set of policies and practices that Marrett had set in place. Apart from the potential for human agency to dominate, the reality was that the Marrett changes had not become routine. They were still being embedded in organisational routine. There appeared to be support outside of the Department for the abandoning of the transfer-pricing system because they felt it was a nuisance and added nothing to their understanding of the processes in ETSA.

#### **8.4.2 Signification**

There was clearly a change in signification. Giddens (1984) identified the interpretive scheme as the modality of signification, and I have shown the changes in interpretive scheme as ETSA moved from an engineering-based supplier to an organisation focused on achieving increasing profit by looking after customers and

increasing efficiency. The language changed from engineering language to business language. Staff at all levels became used to the ideas of customer service and profit. The internal customer was brought into the language. External customer service became more important. This is consistent with the analysis of Sloan at GM (Macintosh, 1995). The Sloan role at ETSA was played primarily by Marrett, who changed the language by bringing in a broader language including cost, customer, and efficiency. Armour brought in the language of electricity prices for the external customer as a key aspect of communication. Price became a key determinant of the future of ETSA and hence of the language system.

The interaction of signification works through communication. Both the communication channels and the message changed. As the network broke down more formal communications replaced it. The new focus on ETSA as a business was communicated in internal publications.

### **8.4.3 Legitimation**

As was suggested in Chapter 3, accounting can be used to establish a moral consensus. As with the General Motor's case the "moral underpinnings" became profit seeking rather than technical excellence. The accounting approaches under Marrett helped support a transition to a new mode of morality. As at the University of Wisconsin financial systems provided "a norm in terms of which legitimacy of particular actions could be assessed..." (Macintosh and Scapens, 1990, p.465). The shift to financial outcomes as a way of legitimising behaviour was the subject of some resistance at ETSA. The impact on employees, the people in the organisation, had been such a central feature of the moral order that it was hard to overturn.

Two levels of morality in the pre-Marrett can be identified. They related to:

1. morality to the community
2. moral obligations to employees

In relation to the previous community obligations, many were abandoned including ETSA's role as a training provider for South Australians and as a supporter of

failing regional communities. The morality of profit had a possibility of overwhelming the previous morality of care for the disadvantaged groups – especially pensioners. Political visibility reduced the impact of more freedom in relation to pricing, and so, although the organisation may have preferred a completely market oriented approach, this was not possible.

In relation to workers, the previous moral order of care from the time of employment, often as teenagers, through to retirement was passed over for a concern for the efficiency of the organisation. Workers moved from a confidence of a job for life to considerable uncertainty. Only safety remained a significant issue for the morality of care. Under Armour, concentration on accidents was increased. Workers could cynically see this as a care for the profits, because of workers compensation claims, more than care for them as individuals. As previously noted, Ted was renowned for a fundamental attitude of care.

#### **8.4.4 Conclusions from Structuration**

Structuration helps connect research into change by providing a common sensitising device. The importance of human agency in reproducing routine or in times of crisis in creating change is significant in ETSA. Through its long history the routines of organisational life were reproduced. Whereas GM was more obviously in crisis than ETSA, there was still the opportunity for a human agent to bring about profound change. The continuing crisis under Armour and the authorisation power given to him by the board of ETSA and the State government gave him continuing power to bring about change. Structuration brings power into view as a critical issue in change and not as a secondary consideration.

The dimension of legitimation is useful in the ETSA research as there was a change in what was moral. I have particularly highlighted the changes to the moral order in relation to employees and community.

The problem in relation to the use of structuration in the analysis of ETSA and the Department is that the time frame is too short to reflect on the routines and changes. At the end of the research in 1997 employees did not perceive any clear routines that could operate at the level of practical consciousness. This confusion will only be resolved when these employees become established in the new companies that have been set up, out of ETSA which will develop new routines with their own interpretive schemes, facility and norms.

## **8.5 Other Approaches to Research in Organisational Change**

There are some consistent themes with Ogden and Anderson (1999). As with some of the water authorities the same accounting that apparently gave them more freedom to manage provided a double edged sword in enhancing the visibility of managers' performance. The significant difference in the Department was that over time accounting measures became less important as employee number measures became more critical. There also was not any concern about the increased visibility as a result of the ABC system because it was never used deleteriously from the perspective of the managers of the Department.

There appeared to be none of the negative views of ABC as raised by Ezzamel et al (1998). There was no recognition that ABC was a weapon for management control. Accounting was seen as enabling. Was this simply a result of the different responses to an accounting technology or does it bear upon the issue of bias due to belief systems? Did I hear the voices of approval simply because I believed that ABC was more helpful than problematic? Did Ezzamel et al (1998) conclude that ABC was a system of managerial control simply because of their prior beliefs that accounting was often a system of control? Subjectivity of the researcher may be a central issue here.

## 8.6 Conclusions

All approaches to organisational change used in this chapter have produced different insights. The Laughlin framework has enabled my research to be linked back with the prior research. The idea of kicks and tracks has been useful in exploring the impact of change. Accounting as an important part of the design archetype has been a focus. The ETSA research adds to the literature that sees accounting not always as problematic but sometimes as enabling. Other forms of accounting such as counting of heads were much more serious in ETSA. In the Department there was no absorbing group that could reduce the impact of change because the desire to reduce staff meant that many of them left. With them went years of technical expertise, but also the political expertise to negotiate and resist change.

The literature on boundary maintenance is useful because it helps explain the initial positive attitude to ABC as a binding structure and in maintaining the boundary of the Department. Accounting helped create a single organisation out of something which had been a collection of activities in the larger organisation. Accounting was useful to provide a binding mechanism by tying together the activities in the Department that could be justified within the new costing culture. Those areas that could not meet the objectives of cost-competitiveness must leave for the good of holding together a viable service entity.

Finally, the concept of structuration brings a link between a small amount of research that has used this framework as a sensitising device in examining organisational change. Two aspects of structuration are particularly useful. The perspective of domination brings to the fore the role of accounting in control as a power device. While Soin (1996) showed concern in being able to explicitly bring power into the Laughlin framework, it is central to Giddens understanding of social change. The dimension of legitimation helps identify changes in what was considered “moral” with the changes in the organisation. As with previous research, accounting and profit can become the means of legitimising. Structuration is also useful because it explains periods of relative organisational stability punctuated by periods of change.

In the last chapter I draw together the conclusions of this research and recognise some research challenges for the future.

## 9 Conclusions

The concluding chapter draws together several insights. The first section summarises the major findings. The next section covers the limitations of the research. Thirdly, I suggest a future research agenda.

### 9.1 A Summary of the Research Findings

I set out to explore Activity Based Costing in its organisational context. I commenced with a presumption that the organisational context would impact on the accounting system, and that the accounting system would change the organisation. To do this I engaged in a longitudinal study of ABC from 1993 to 1997.

The results of this study were relevant to three key areas. The first relates to the way organisational context shapes an accounting system. The longitudinal study provided a means of examining this. The second relates to the expectations for a new accounting system and how those expectations were not met over time. The third area of findings concerns the role of accounting during organisational change.

Chapter 6 shows how organisational circumstances and pressures moulded the use of ABC. In 1991, consultants who wanted to continue their consulting work with ETSA initiated the ABC system. ABC went through the following stages:

- ABC as a strategic decision-making tool – Managers were willing to accept the advice of consultants to implement ABC because they believed it would be a useful strategic decision-making tool. For example, the managers could use this information to decide which services the Department should keep, and how it

could improve those services. The managers were also hopeful that ABC would produce a change of culture, to a more cost conscious attitude amongst employees. There were some changes in work practices and some changes to services offered as a result of the ABC system. However as the rate of change increased, logical, rational approaches to decisions were overall abandoned. With the dramatic reductions in staff, decisions had to be made on the basis of whom was left who could do the job.

- ABC as a transfer pricing system – By 1994 the ABC system was perceived primarily as a transfer pricing system. It gained considerable legitimacy from this role. Supervisors and their workers, who claimed to know nothing of ABC by any of its names, could immediately identify with the transfer pricing system. Transfer pricing was a core part of their activities.

As a transfer pricing system ABC could still support the cultural change process. It encouraged employees to think about whether their customers were receiving value for money and how they could act to reduce the hourly charge. Its weakness was that it had become so tied in with transfer pricing that when transfer pricing was abandoned across the organisation, ABC went with it. A change of the staff at the top of the organisation brought an end to the system of accountabilities based on profit centres and transfer pricing, and a return to the old order of managing by budget line items. Accountability became based on control of costs in total, without any particular means of managing that cost. So cost cutting, not income generation, was critical. The lack of any clear accountabilities, other than managing by line item budgets, was a problem for those who were managers or supervisors.

- ABC as a guide to strategic decisions. During 1995 and 1996 the old ABC data was used to benchmark ETSA against external providers in a contestability project. In 1996, data based on ABC were used to convince senior managers to keep some work inside. This was part of the original intention of ABC – to show

what sections of the organisation should survive. However this information was out of date and there was no way of updating it. There was no ABC champion left, although there were several staff who wished they had the data. Ted, the Manager, and Byron, the Business Accountant, had both moved on and there was no-one who had the influence or resources to push it forward.

So ABC went through changes during its “life”. The purposes for which it was originally implemented were changed by organisational needs at particular points in time. The hopes that it would lead to structured, rational, decision processes were destroyed by the rapid changes. Especially important to the change in the use of ABC were the power relationships in the organisation. Change processes almost invariably mean that some systems will be abandoned or changed. In this case it was the ABC system that was abolished. For many managers and others this was viewed as a step back to the past, a move back to the old style of top-down control through hierarchies.

Chapter 6 concludes with the explanation of yet another ABC failure. In the case of ETSA, the lack of a champion appeared to be the most significant cause of failure, coupled with the lack of broad ownership of the ABC system. The review of the development and use of the ABC system in Chapter 6 shows that although accounting is potentially powerful to bring about change (Broadbent and Guthrie, 1992) in this case accounting was not powerful.

In Chapter 7 an inductively derived model of the development of ABC was outlined. The dominant motivation of the people in the Department appears to have been survival. The pressures for change, both externally and internally, were explored. ABC was one response to these pressures and the desire for survival. ABC could help in two ways. It could help resist change by providing the managers with tools to prove why they should survive, to demonstrate to senior management that they were a viable competitive unit. At the same time ABC was able to encourage change by making all employees more conscious of cost. This provoked new work practices,

rationalisation of workspace, seeking new work to expand the business, and rationalisation of services that could not be supplied economically.

However, the case study shows that, despite responses such as ABC, no rational approaches could help the staff to manage their way through to survive. Senior management were intent on a new accounting of their own, a significant reduction in employee numbers. This destruction of the capability of the workforce and technical capability of the Department had no answer. Counting of heads was a more powerful accounting than dollars, and the massive destruction of the workforce of the Department continued.

The hopes and aspirations of Ted, the Department manager, and others around him were destroyed. There was a massive destruction of the skill-base and expertise of the Department. Even if it could demonstrate that it could compete with external service providers, it did not have the staff left to do a task or provide a service. The Department could neither be retained as a viable service provider in the new ETSA, or be sold off to private enterprise as a complete entity. The Department, as it had been, ceased to exist.

The concept of survival as an explanation of behaviour is relatively unique in the literature. Researchers have rarely captured a section of an organisation where its members felt under such significant threat, and have then been able to follow the responses to try to guarantee long-term survival. The Department within ETSA does not provide a generalisable case. However in the future, as working life becomes less certain and organisations show less commitment to historical traditions, other managers and employees may face a similar situation – the need to justify their own survival and create the circumstances in which they can survive.

As in this case, survival is not guaranteed even if the most appropriate actions are taken. The members of the Department were not so naïve as to believe that rationality and good logic would necessarily prevail. They did believe that it was

better to be prepared, even if they still went under, than to give up and certainly be destroyed. It is not unexpected that in many circumstances political imperatives will be so strong that no system of rational management will be sufficient to bring about the change required.

In Chapter 8, the way accounting is implicated in organisational change was explored. Accounting is often seen as problematic in organisational change situations. It is accounting that is used as a change agent, to bring about new agendas of managers. Multiple approaches to analysing organisational change were used in this chapter to explore the role of accounting.

Many previous researchers have used the Laughlin framework. The idea of kicks and tracks has been useful in exploring the impact of change. Two particular kicks were traced. The first was the changes brought about by Marrett in the late 1980s and early 1990s, which brought about some change to the design archetypes. The second was the kick after the election of a new Liberal government and the appointment of Armour. The ETSA research adds to the literature that sees accounting not always as problematic but sometimes as enabling. Other forms of accounting such as counting of heads were much more prominent in ETSA.

The role of absorbing groups has been important in other research. In the Department there was no absorbing group that could reduce the impact of change because the group that had that potential left. They took with them the political expertise to negotiate and resist change.

The concept of boundary maintenance was useful because it explained the initial positive attitude to ABC as a binding structure and in maintaining the boundary of the Department. It helped create the Department as well as identifying what parts of the Department could not be retained. Those areas which were unable to meet the demands of cost-competitiveness left for the good of holding together a viable service entity.

Finally, structuration theory was useful as a sensitising device in examining organisational change. Structuration explains the lack of change in organisations as knowledgeable agents reproduce social structures. Crisis gives the opportunity for agents to bring about change. The problems of ETSA in the late 1980s provided the perfect opportunity for a powerful leader like Marrett to bring about change. The State Bank crisis of the 1990s produced a climate where the State Government could bring about change in its operations and its service providers such as ETSA. At that point Armour was the agent who was given the power to bring about change.

Domination makes clear the role of accounting as a power device. While Laughlin's framework and boundary maintenance only partially address the issue of power it is central to Giddens understanding of social change. Power is critical to understanding the changes in accounting systems at ETSA. Legitimation enables the focus to be on what is considered "moral" with the changes in the organisation. At ETSA, as with previous research, accounting and profit can become the means of legitimising.

So there are three major contributions to the literature provided by this thesis. Firstly, it provides a longitudinal study of the way an accounting system, ABC, was shaped over time by organisational circumstances. ABC is not an inflexible, immutable system, but responds to changes in the organisational context. Secondly, it introduces survival as a response by managers to change. ABC, and other accounting and management systems, can be introduced to help achieve survival. The ABC system could assist survival by resisting change demanded by senior managers while convincing staff of the need to change. Thirdly, it builds on the literature on accounting and organisational change to show how accounting can be used in a positive light during organisational change. However, accounting may be relatively powerless.

## **9.2 Limitations of the Research**

Embarking on a longitudinal study of a single organisation was both difficult and risky from a research viewpoint. Case study is now a well accepted method in

management accounting research, although Kaplan (1993) recommends it particularly for more experienced researchers who can wear the risks. Researchers who adopt the case approach do so knowing that they are not able to claim generalisable truths. Most of their data will be qualitative and not susceptible to a perceived simple process of “number crunching”. Rather it will need careful analysis to give an account that is true to the situation and provides insights to the readers.

The existing case study research in management accounting is characterised by diversity of approaches to epistemology, type of study, and method. Calls for increasing use of case and field research in management accounting have come from researchers with diverse epistemological and ontological beliefs. These include mainstream researchers who approach case research from a positivist perspective (Kaplan, 1984); interpretivist (Scapens, 1990) and critical researchers (Smith, Whipp and Willmott, 1992). However case study writers in accounting seldom make clear their theoretical and epistemological assumptions (Otley and Berry, 1994). Neither do they make clear their data sources, time period of studies and the manner in which conclusions can be drawn. It is the nature of a thesis that specifics have been provided in all of these areas.

The variety of approaches to case studies makes it all the more difficult to establish standards by which excellent research in this genre can be judged. This enables sceptics to reject case studies as flimsy because of the lack of objective evidence. Despite attempts to establish benchmarks for good field and case research (Bruns and Kaplan, 1987; Ferreira and Merchant, 1992), the issue of what constitutes good case research is still open.

Starting from the grounded theory tradition brought its own limitations. Symbolic interactionists have run the risk of shutting themselves off from the broader social and historical context, and listening only to the voice of the actors. I made every attempt to draw upon this contextual background and move beyond the assumptions of pure grounded theory. The work of Layder (1993) was helpful. I moved beyond

the ideas of the actors and their experiences and brought to bear the broader historical and contextual issues that affected this organisation. Unfortunately I was not aware of this approach to research when I started, Layder's (1993) book had not been published. The research process would have been more efficient and perhaps more effective if I had built the research on Layder's design from the beginning. This work to some extent, bears many of the limitations of the grounded theory approach, in not incorporating context as strongly as I have might have.

As an important part of my research design, I did not have a hypothesis to test. Rather I had a supposition or expectation to fill out in relation to accounting and its organisational context. This provided some focus and shut off some interesting directions of enquiry which would have made the research even more time consuming than it became. There is much more material in the data than can ever see the light of the day. As Lyn Richards<sup>19</sup> once said, "If you can explain 10% of your qualitative data you are doing well".

The real risk was that access to the site would be limited. This did not happen. I continued to receive relatively unrestricted access to staff throughout the research even when there was a change in management. The research came to an end inasmuch as ABC came to an end. The research may have been much richer had ABC continued for several more years and had time to have more effect.

There was one area of the research, organisational change, that was identified relatively late. The nature of a longitudinal study is that it is often difficult to predict all the important aspects of the context that should be captured. Organisational change was one aspect, that if identified earlier could have been more explicitly captured and explored.

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A further limitation was in the data collection process. The fact that the members of the organisation knew that I was interested in ABC meant that discussions were biased towards accounting issues, whereas I wanted to capture discussions of the broadest range of management issues. There was also some pressure from managers to speak to particular people so there could have been bias not to include the views of “stirrers”. Although I endeavoured to contact people from all levels of the organisation, there is a bias towards people from the upper levels. This was mainly because of the lack of insights into ABC at the lower levels, and my inability to draw any specific conclusions about the relationship between ABC and cost consciousness.

At the end of this research it is clear that it bears the limitations of the restrictions of my own life experiences. As was clear from chapter 1, this remains my story, with all the limitations that brings with it.

### **9.3 A Future Research Agenda**

As accounting researchers there is still so much to learn about the role of accounting in organisations. There is now a developing literature relating to ABC. From the study of ETSA there is more work to be done on the longer term impacts of the ABC work. Will ETSA redevelop ABC in the future given that it can be set up as part of the SAP system? If it is rejuvenated, what role will ABC play at ETSA, given that many of the roles it was originally expected to play have been made redundant by the major organisational changes?

The broader issue of whether an ABC system can influence the long-term behaviour of members of an organisation is unanswered by this research. ABC was discarded and so I cannot tell what affects it would have had. The next research site may be one that has used ABC for an extended period and has used it to develop cost conscious behaviour in employees coupled with awareness of the drivers of long-run performance such as quality and customer satisfaction. Turney’s (1991) approach to work based teams using ABC seems attractive but can it be

implemented in a way which delivers real empowerment to the workers without managers using it as another tool of control (Ezzamel et al 1998)? Can ABC be enabling rather than controlling in situations of organisational change?

There are other relatively new techniques such as the balanced scorecard, throughput accounting, and triple-bottom line reporting. Given that some advocates of these techniques will suggest that their use should change the culture of an organisation as well as management decision-making, there is a more critical issue than whether these techniques can be justified as technically useful. What impacts do or will these techniques have on the lives of the people in the organisations which use them? Are these instruments of managers to subordinate and control their employees? Do they have value to assist employees to take control of their working lives? Or do they give an appearance of empowerment while making their behaviour more visible and controllable?

Most of the new forms of accounting are couched in an environment where top-down hierarchical control is assumed. For example, the balanced scorecard assumes a mechanistic approach to the setting and communication of strategy. Also there is an implicit assumption that organisations are neat hierarchies where strategic directions can remain unambiguous and undisputed. For example: "The goal of the communication process is to align all employees within the organisation ... to the strategy" (Kaplan and Norton, 1996, p.222).

The idea of aligning individuals to the strategy suggests the concept of goal congruence, which has been strongly criticised for its lack of achievability and even its desirability (Parker, 1976). Within the strategy literature it is argued that conflict and tension are desirable aims of a creative, renewing organisation (Pascale, 1990; Stacey, 1993); accounting researchers tend to ignore these factors. Furthermore, because these systems concentrate on a top-down undisputed view of strategy they ignore the importance of emergent strategy (Mintzberg and Waters 1985). Leadership intentions may not be precise, concrete and explicit, and more or less

shared (Mintzberg and Waters, 1985, p.6). The role of employees at all levels in influencing the direction of the organisation cannot be ignored. And yet the literature on these new techniques ignores these broader issues in organisations.

So the future research agenda must continue to look at new accounting technologies in their organisational context. How realistically do these techniques take account of the dynamics and power in an organisation? To address this research question further longitudinal studies will be required to understand the impact of the technology on the organisation over at least a three to five year time frame.

The concept of survival may well emerge in other locations as an explanation of large investments in accounting and information systems. A leading international co-ordinator<sup>20</sup> of cost management systems once said that only organisations in crisis implement ABC. While this was no doubt an exaggeration, the survival concept may well explain why some organisations in crisis spend significant sums to develop new systems. Here is a specific idea that should be further tested. Although other factors may well give rise to survival attitudes it is likely that the concept will exist in other organisations. Future researchers can explore how this concept impacts on the broader behaviour of managers and their subordinates. The real difficulty here is to identify sites where the survival desire is likely to come in to play.

The model in chapter 7 could then be explored in more detail. The range of antecedents suggested in the model could be the basis of further examination. Some of these will be unique to the ETSA case study. There may be other antecedents of the survival attitude that will be revealed. The consequences of the survival attitude, resistance to change and promotion of change, should also be examined in other contexts. The resistance to change response can, by its nature, only be found

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<sup>20</sup> An off the record discussion with a co-ordinator of cost management with an international applied research organisation.

amongst middle managers usually in separate business units. The promotion of change attitude is likely to be found at all levels of management, but the research shows that it may not be highly successful. The circumstances in which accounting can be effective in promoting change, or the problems for accounting in bringing about change need further elaboration. In particular this research could look at new accounting technologies which are promoted on the basis of their effectiveness for bringing about change. Some of these technologies may be less confrontational and more influential in changing employees' understandings about an organisation.

As private sector accounting becomes more acceptable in the public sector it is likely that many of the techniques will be encouraged in the public sector. As in this research, often this may come from consultants, and from some academics who have enthusiastically supported some of these techniques. There is room to examine the appropriateness of these techniques in a domain where the public interest should predominate. Academic accountants in Australia have generally been reluctant to explore the impact of accounting in the public sector. The research focus of management accounting researchers should incorporate more research in public sector accounting.

This has been a valuable learning experience for me, and has contributed to the literature in accounting and management. There is still much further work to be done to uncover the role and impact of accounting in organisations.

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## APPENDIX A - INTERVIEW PROTOCOL

### GENERAL

Tell me about the ROUTINE aspects which affect your day?

- \* what might interrupt this?
- \* make it unusual?

Who do you have frequent CONTACT with ?

- how do you find out what's going on?
- what about up/down the way?

What about PRIORITIES?

- what get's left out when its too difficult to do everything?
- how have your priorities changed through experience?
- how do current projects like ABM fit into your work?

How do you deal with PROBLEMS when they arise?

- What can go wrong?
- How do you check that?

What's critical for SUCCESS in your job?

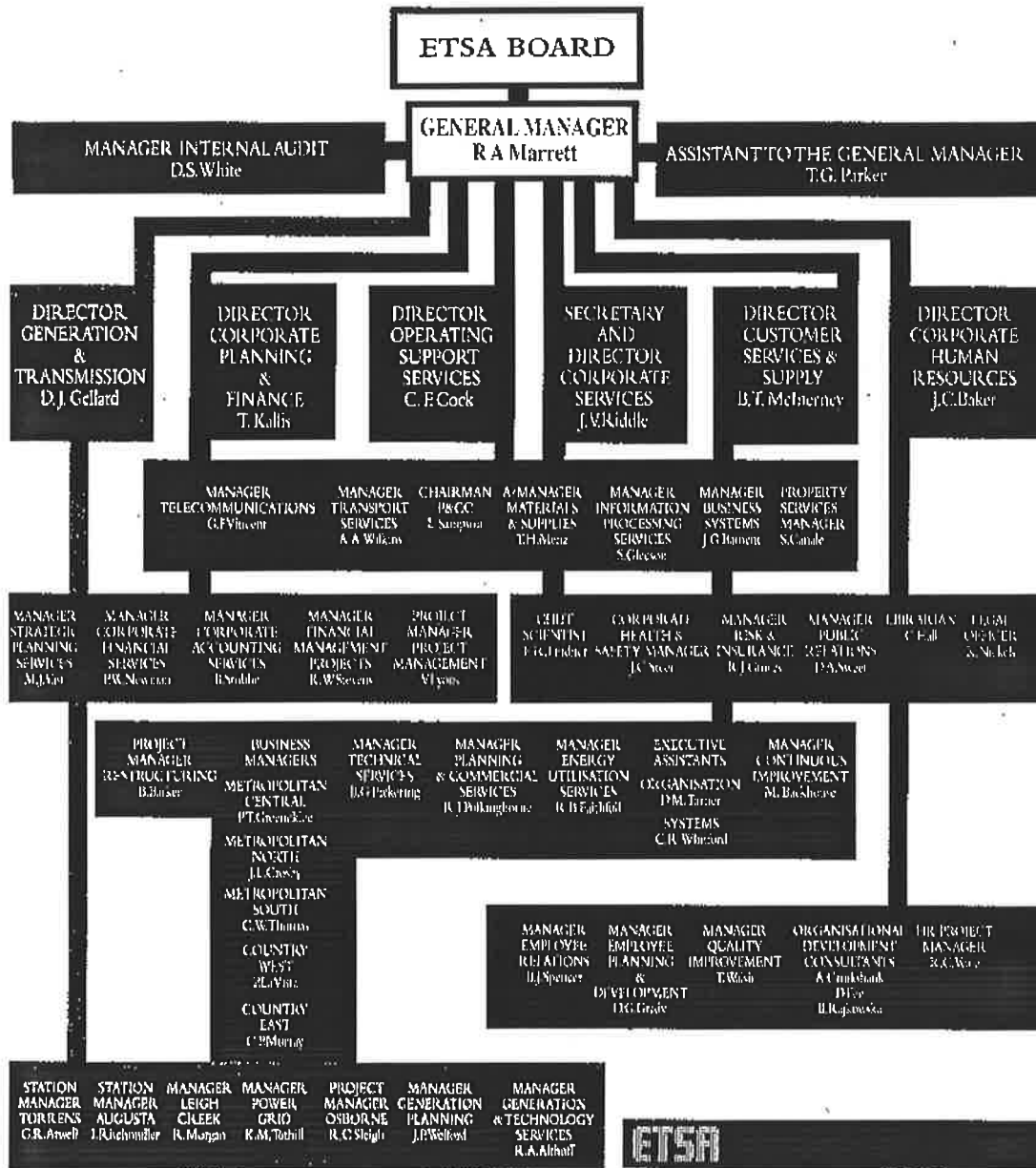
- What aspects have you found most pleasant?
- What was your biggest disappointment last year?

### SPECIFIC

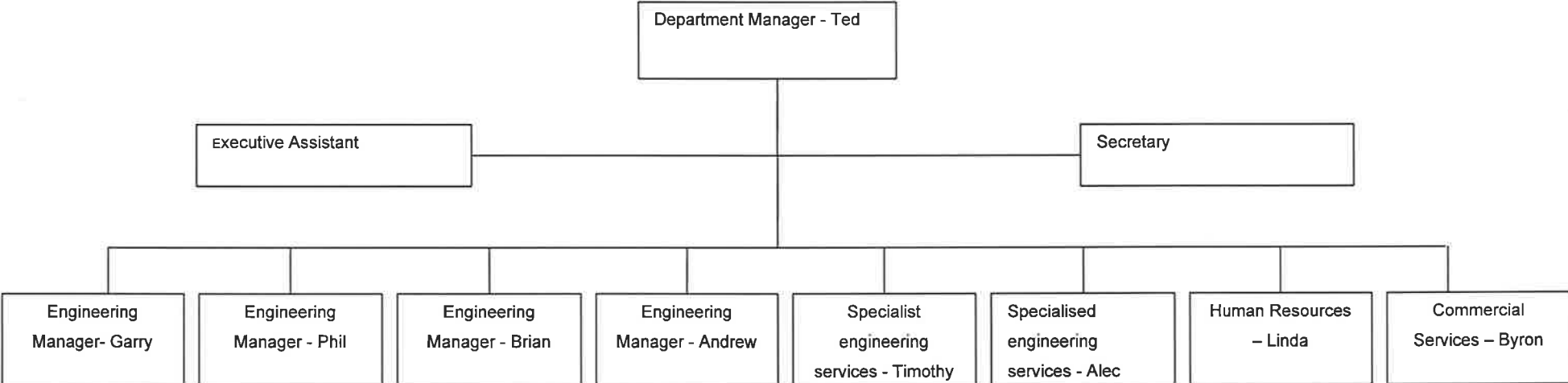
- Why do you think ABM was introduced into your business unit?
- What is your attitude to ABM?
- What specific things about it need changing?
- Are the results being used, and if so, how?

# APPENDIX B – ETSA ORGANISATIONAL CHART 1993

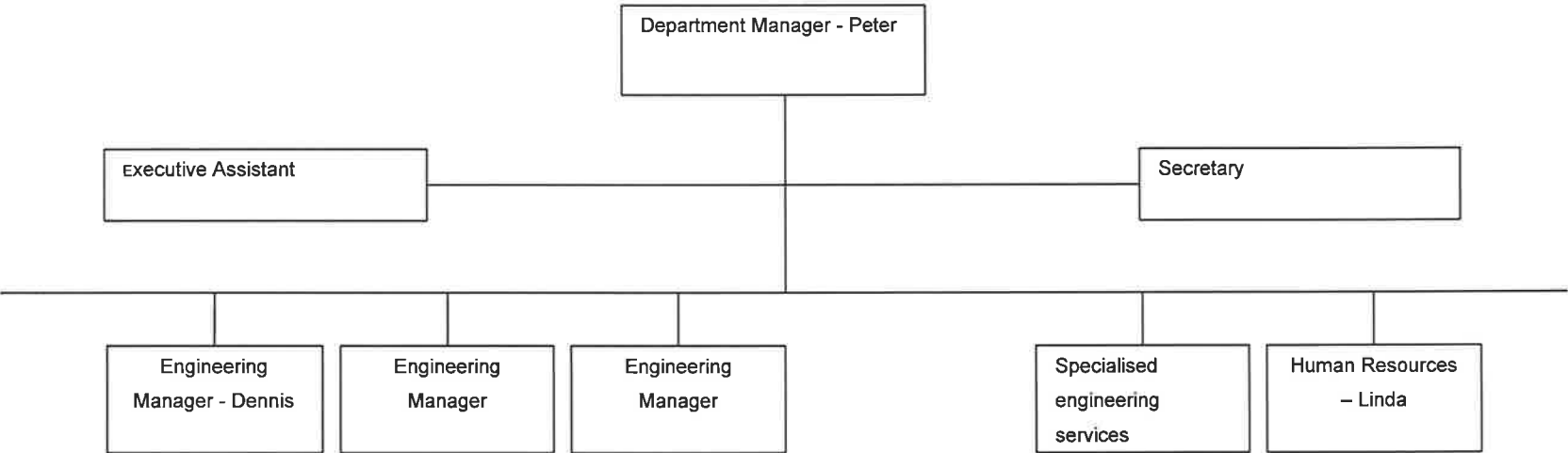
## ETSA ORGANISATIONAL STRUCTURE



APPENDIX C – DEPARTMENT ORGANISATIONAL CHART 1994



APPENDIX D – DEPARTMENT ORGANISATION 1995



## APPENDIX E – PROCESS OF CODING

This appendix provides more detail on the process of coding. Three particular stages are demonstrated:

1. Initial coding
2. Merging and redefinition of codes
3. Analysis based on the codes

### 1. INITIAL CODING

Each interview was coded. Each section of text could be coded to multiple nodes within the NUD.IST software. An example of the coding for a section of text is shown below, reproduced from NUD.IST. Six codes appear in this text and margin coding keys are shown for selected nodes in document ETSA12 for lines 386 to 412:

- A: (4 3) General issues in financial management/Important
- B: (4 13) General issues in financial management/Accountability
- C: (8 6) /Change/Culture
- D: (10 3 3) /ABM/View about ABM/Proving competitiveness
- E: (11 4) /Financial management tools/Transfer Pricing
- F: (19 1) /Old culture/Bucket of money
- G: (30 12 1) Competitiveness.viability.profitability/Competitive

+++ ON-LINE DOCUMENT: ETSA12

++ Text units 386-412:

Another thing that happened was transfer pricing.	386	E
The advent of transfer pricing - where yeah O.K. the	387 A	E
Trust has got a bucket of money and its no longer the	388 A	E F
corporate bucket of money that you want a job and you	389 A	E F
just dip into this bucket. Its now each business	390 A B	E F
unit is accountable for its own income and	391 B	E
expenditure and they've got it out like a balance	392 B	E
sheet and they've got to look good at the end of the	393 B	E
day, sort of thing. So transfer pricing was all about	394	C E
making people more commercially minded and think	395	C E
along those lines. I've got no personal gripe with	396	C E
transfer pricing. Some of my people hate it - they	397	E
reckon its bead counting and its a waste of time. I	398	E
figure they haven't experienced it, they are at the	399	E
level where they just provide their quote and that,	400	E
but it doesn't really impact on them. Only that they	401	E
don't get the job. Its not the cost so much I think	402	D E
that transfer pricing in our branch I think if any	403	D E G
thing the transfer rate for our resources is probably	404	D E G
been lower compared with the outside market but its	405	D E G
really opened the eyes of people you build a sub	406	C D E G

station and they don't sort of look at the design the	407	C	E
bit that supports it, where all the drawings come	408	C	E
from some of these drawings take 50 man hours to do	409	C	E
the big project drawings. That's \$2,500 worth just	410	C	E
to produce a drawing but its not just the drawing	411	C	E
its the design associated with it and this has always	412	C	E

## 2. MERGING AND REDEFINITION OF CODES

Codes were cut and merged. Some codes were abandoned and merged with other codes. Definitions of codes were rechecked. The final list of codes (or nodes as they are called in NUD.IST) is reproduced below from the NUD.IST project. Base data nodes were set up for the purpose of pattern matching to explore any patterns between the characteristics of the interviewees and their beliefs. This process of analysis was not used in the end as not essential to the research design.

- (1) /Base Data
- (1 1) /Base Data/seniority
- (1 1 1) /Base Data/seniority/level 2
- (1 1 2) /Base Data/seniority/level 3
- (1 1 3) /Base Data/seniority/level 4
- (1 1 4) /Base Data/seniority/level 5
- (1 2) /Base Data/professional group
- (1 2 1) /Base Data/professional group/engineering
- (1 2 2) /Base Data/professional group/technical
- (1 2 3) /Base Data/professional group/accounting
- (1 2 4) /Base Data/professional group/human resources
- (1 3) /Base Data/age
- (1 3 1) /Base Data/age/<20yrs
- (1 3 2) /Base Data/age/20 < 30 yrs
- (1 3 3) /Base Data/age/30 to < 40 yrs
- (1 3 4) /Base Data/age/40 to < 50 years
- (1 3 5) /Base Data/age/>50 yrs
- (1 4) /Base Data/length of service with Technical Services
- (1 4 1) /Base Data/length of service with Technical Services/<2 years
- (1 4 2) /Base Data/length of service with Technical Services/2 to < 5 years
- (1 4 3) /Base Data/length of service with Technical Services/5 to <10 years
- (1 4 4) /Base Data/length of service with Technical Services/> 10 years
- (1 5) /Base Data/Period
- (1 5 1) /Base Data/Period/Jan to June 1994
- (1 5 2) /Base Data/Period/July 94 to march 95
- (2) /Data Type
- (2 1) /Data Type/interviews
- (2 2) /Data Type/observation of meetings
- (2 3) /Data Type/telephone discussions
- (2 4) /Data Type/Memos and informal correspondence

- (2 5) /Data Type/Formal reports
- (2 6) /Data Type/Newspaper articles
- (3) /Priorities
- (3 1) /Priorities/Relative Priorities
- (3 1 1) /Priorities/Relative Priorities/Safety
- (3 1 2) /Priorities/Relative Priorities/Financial management
- (3 1 3) /Priorities/Relative Priorities/Survival
- (3 1 4) /Priorities/Relative Priorities/Your People
- (3 1 5) /Priorities/Relative Priorities/Technical Issues
- (3 1 6) /Priorities/Relative Priorities/Customer
- (3 1 7) /Priorities/Relative Priorities/Timeliness
- (3 1 8) /Priorities/Relative Priorities/Getting work
- (3 2) /Priorities/Priorities changed over time
- (3 3) /Priorities/What get's left out?
- (4) /General issues in financial management
- (4 1) /General issues in financial management/Disinterest
- (4 3) /General issues in financial management/Important
- (4 4) /General issues in financial management/Unsure of role
- (4 5) /General issues in financial management/Time issues
- (4 8) /General issues in financial management/Too many projects
- (4 9) /General issues in financial management/Lack of direction
- (4 10) /General issues in financial management/The Accountants
- (4 12) /General issues in financial management/Recording
- (4 13) /General issues in financial management/Accountability
- (5) /Problems
- (6) /Important for success
- (6 1) /Important for success/Maintain safety
- (6 2) /Important for success/Technical Issues
- (6 3) /Important for success/Judgment
- (6 4) /Important for success/Handling people
- (7) /Routine
- (7 1) /Routine/Financial management
- (7 1 1) /Routine/Financial management/Budgeting
- (7 2) /Routine/Human Resources
- (7 3) /Routine/Technical Issues
- (7 4) /Routine/Change in Routine
- (8) /Change
- (8 1) /Change/Reasons for change
- (8 2) /Change/Reduction in middle management
- (8 3) /Change/Downsizing
- (8 4) /Change/Teams
- (8 5) /Change/More involvement
- (8 5 1) /Change/More involvement/Brains at the gate
- (8 6) /Change/Culture
- (9) /Communication
- (9 1) /Communication/Meetings

- (9 2) /Communication/Board reports.debriefs
- (9 3) /Communication/Planning and commercial services
- (9 4) /Communication/Etsa telegraph
- (9 5) /Communication/Staff networks
- (9 6) /Communication/Customer liaison
- (9 7) /Communication/INformal Contact
- (9 8) /Communication/Committees
- (9 9) /Communication/Official bulletins
- (9 10) /Communication/Subordinates
- (9 11) /Communication/Video
- (10) /ABM
- (10 3) /ABM/View about ABM
- (10 3 1) /ABM/View about ABM/Technical Issues
- (10 3 1 1) /ABM/View about ABM/Technical Issues/Data Collection
- (10 3 2) /ABM/View about ABM/Transfer Pricing System
- (10 3 3) /ABM/View about ABM/Proving competitiveness
- (10 3 4) /ABM/View about ABM/Eliminating activities
- (10 3 6) /ABM/View about ABM/lack of experience
- (10 3 7) /ABM/View about ABM/Essential
- (10 3 8) /ABM/View about ABM/Cost Reduction
- (10 3 9) /ABM/View about ABM/Time consuming
- (10 3 10) /ABM/View about ABM/Don't know
- (10 3 11) /ABM/View about ABM/More accurate project.job costs
- (10 3 12) /ABM/View about ABM/No time to use
- (10 3 13) /ABM/View about ABM/Good value for money
- (10 3 14) /ABM/View about ABM/Timing
- (10 3 15) /ABM/View about ABM/Accuracy
- (10 3 16) /ABM/View about ABM/Job Redesign
- (10 3 17) /ABM/View about ABM/No affect
- (10 3 18) /ABM/View about ABM/Just another system
- (10 3 19) /ABM/View about ABM/Appreciate costs
- (10 5) /ABM/Adaptations to ABM
- (10 5 1) /ABM/Adaptations to ABM/Refining activities
- (10 5 2) /ABM/Adaptations to ABM/Improving collection of data
- (10 5 14) /ABM/Adaptations to ABM/Needs integration with systems
- (10 38) /ABM/Reason why adopted ABM
- (10 38 1) /ABM/Reason why adopted ABM/Transfer pricing
- (10 38 2) /ABM/Reason why adopted ABM/Better costing of services
- (11) /Financial management tools
- (11 1) /Financial management tools/Budget
- (11 3) /Financial management tools/General ledger
- (11 4) /Financial management tools/Transfer Pricing
- (11 5) /Financial management tools/Internal control
- (11 6) /Financial management tools/Costing of services
- (11 7) /Financial management tools/Measuring Performance
- (11 8) /Financial management tools/Cost-benefit

- (11 9) /Financial management tools/Monthly reports and variance analysis
- (11 10) /Financial management tools/Expenditure controls
- (11 11) /Financial management tools/Inventory Management
- (11 12) /Financial management tools/Project Management
- (13) /Human Resources Issues
- (13 1) /Human Resources Issues/VSP'a
- (13 2) /Human Resources Issues/Succession planning
- (13 3) /Human Resources Issues/Safety
- (13 4) /Human Resources Issues/Staff Deployment
- (13 5) /Human Resources Issues/Pay
- (13 6) /Human Resources Issues/Setting Pay
- (13 7) /Human Resources Issues/Planning
- (13 8) /Human Resources Issues/Training and development
- (13 9) /Human Resources Issues/Flexibility
- (13 10) /Human Resources Issues/Job satisfaction
- (13 11) /Human Resources Issues/Right skills
- (13 12) /Human Resources Issues/Job security
- (13 13) /Human Resources Issues/Feedback on performance
- (13 14) /Human Resources Issues/Nomenclature
- (13 15) /Human Resources Issues/Resourcing
- (13 15 1) /Human Resources Issues/Resourcing/Over resourced
- (13 16) /Human Resources Issues/Job classificatn
- (13 17) /Human Resources Issues/Equal treatment
- (13 18) /Human Resources Issues/Rehabilitation and workcover
- (13 19) /Human Resources Issues/Industrial action
- (13 20) /Human Resources Issues/Apprentices
- (13 21) /Human Resources Issues/Discipline
- (13 22) /Human Resources Issues/Promotion
- (14) /Outsourcing.privatisation
- (14 1) /Outsourcing.privatisation/Reverse outsourcing
- (14 2) /Outsourcing.privatisation/Contestability
- (14 3) /Outsourcing.privatisation/Quality of work
- (15) /Core activity
- (16) /Customer service
- (16 1) /Customer service/Outages
- (16 35) /Customer service/Negotiation with zone
- (17) /Cost Reduction
- (17 1) /Cost Reduction/Reduction in maintenance
- (18) /Management
- (18 1) /Management/Middle management
- (18 2) /Management/New General Manager
- (18 3) /Management/Robin Marritt
- (18 4) /Management/Devolution of control
- (18 5) /Management/Centralisation of control
- (18 6) /Management/Lack of direction
- (18 6 1) /Management/Lack of direction/Acting managers

- (18 7) /Management/lack of CEO
- (18 8) /Management/Managing upwards
- (18 9) /Management/Involvement
- (18 10) /Management/Don't know
- (18 11) /Management/Slow -
- (18 11 1) /Management/Slow -/Slowness in decision processes
- (18 12) /Management/Managerialism
- (18 13) /Management/New ideas
- (18 14) /Management/Bureacracy.paperwork
- (18 20) /Management/Commercialisation
- (18 23) /Management/Crisis management
- (18 24) /Management/Top down - hierarchical control
- (18 26) /Management/Leadership
- (18 27) /Management/conservatism
- (18 27 2) /Management/conservatism/Double checking
- (18 28) /Management/ Fight for us
- (19) /Old culture
- (19 1) /Old culture/Bucket of money
- (19 2) /Old culture/Continuing
- (19 3) /Old culture/Tell me what to do and I'll do it!
- (19 4) /Old culture/Engineering
- (19 5) /Old culture/One happy family
- (20) /Performance Issues
- (20 1) /Performance Issues/Quality control
- (20 32) /Performance Issues/Improving efficiency
- (20 36) /Performance Issues/Lack of lead time
- (21) /Systems
- (21 1) /Systems/Benchmarking
- (21 10) /Systems/Information Technology
- (21 33) /Systems/Strategic planning
- (21 33 1) /Systems/Strategic planning/Key Result Areas
- (21 34) /Systems/Best Practise Programs
- (22) /External influences
- (22 1) /External influences/Accountability
- (22 2) /External influences/National Grid
- (22 32) /External influences/Statutory Obligations
- (22 35) /External influences/Economic Problems
- (22 36) /External influences/National competition - Hilmer
- (22 36 1) /External influences/National competition - Hilmer/Lack of competitiveness of Leigh Creek
- (22 37) /External influences/State government
- (22 37 1) /External influences/State government/Ideology of out-sourcing
- (22 37 2) /External influences/State government/Short-run focus
- (22 37 3) /External influences/State government/Accountability for publicly conspicuous expenditures
- (22 40) /External influences/State Bank

- (22 40 1) /External influences/State Bank/A Text Search
- (23) /Attitudes
- (23 1) /Attitudes/Trust
- (23 2) /Attitudes/Want to get on with the job
- (23 3) /Attitudes/Blame
- (23 29) /Attitudes/Getting the job done
- (24) /Feelings
- (24 1) /Feelings/Uncertainty-anxiety
- (24 2) /Feelings/Low morale
- (24 3) /Feelings/Threatened
- (24 4) /Feelings/Suspicion of management
- (24 5) /Feelings/Settled
- (24 6) /Feelings/Like the place
- (24 7) /Feelings/Exciting
- (24 8) /Feelings/Comraderie
- (24 26) /Feelings/Annoyance with new systems
- (24 31) /Feelings/Biggest single disappointment
- (24 39) /Feelings/Most Enjoyable thing about job
- (25) /Forward planning
- (26) /Analysis tree
- (30) Survival
- (30 12) Survival/Competitiveness.viability.profitability
- (30 12 1) Survival/Competitiveness.viability.profitability/Competitive
- (30 12 2) Survival/Competitiveness.viability.profitability/Viability
- (30 12 3) Survival/Competitiveness.viability.profitability/Profitability
- (30 12 4) Survival/Competitiveness.viability.profitability/Difficulty of comparison
- (89) /Job security

### 3. ANALYSIS

The nodes developed in NUD.IST were used in two ways:

- They provided an efficient means of collecting and assembling ideas common across the data sources to be used in writing up chapters 5, 6, and 8.
- Analysis and the use of memoing led to connections within the data, from which the model in Chapter 7 was built. Associations of nodes were identified. For example, I identified occasions in the data when the State Bank and survival nodes appeared together, and relationships could be identified. This process is explained in Chapter 7.

## APPENDIX F – A PERSONAL REFLECTION

The experiences at ETSA had parallels with my experiences during down-sizing at the University of South Australia. The University went through a process of across the board cuts, irrespective of educational needs, research performance or staff work-loads. The section below is exactly as it will be published in *Critical Perspectives on Accounting*.

The impossibility of researchers detaching themselves from the research experience was forcibly impressed on me by the reliving of a researched experience. For three years I had been involved in an organisation going through rapid change. I had experienced with the staff their frustration towards management and their ultimate political masters, their sadness at the rapid departure of so many long-term valued colleagues, their turmoil of continuing re-structurings and change, the feelings of humiliation as they experienced the devaluation of long-developed skills and knowledge, the sense of unfairness of benchmarking against organisations removed in time and space, the concern of the abandonment of any community obligations. While this was at a distance it could remain in the consciousness as a curiosity - an experience to share with colleagues and useful for personal gain - “output” - articles and papers to impress my superiors.

But now the tables were turned. Like a bad dream the mix of human emotions was being relived in my own university department. The previous research experience had sensitised my mind to these issues but there was no doubt in my mind of a certain *deja vu*. Any personal detachment had now evaporated. But surely the development and dissemination of knowledge in a university cannot be compared to the production of electricity by a government owned utility? The reliving of the researched experience with minor variations on the same theme brought home potential key issues in the management of public sector organisations. So I relived quotations from the research experience:

***“That would be the hardest battle - to convince the workforce that they have a place, there is a need for them, they are important”.***

University academics like electrical technicians are part of the production process and should be substituted by technology whenever technically feasible. The goal of production is maximum output for minimum input. Labour should be bought in packets as needed - commitment to long-term employees is not of any concern to the public sector organisation of the 90s. All labour is directly substitutable whatever the service being provided is. “Quality” must be preached, but the goal is to minimise complaints.

***“See everybody left, but the work didn’t go away”.***

Both organisations failed in interventions of new accounting technologies - activity based costing systems. Could accounting really bring about rational change? These systems were abandoned, to be replaced by an obsession with smallness - in staff numbers. The community at large then subsidises through pension funds the departure of skills from community “owned” organisations, for those skills either to be snapped up by the profit-making sector or be permanently “moth balled”. “Down sizing” has to become the Molech to whom the lives of any willing or unwilling victims must be sacrificed. “*We used to say how much we loved you and wished for you to stay, now we say how much we loved you and how much we’d like you to go*”. In the university, capable academics were signed off without any “love”. Each resignation was an extra number in the game of attrition.

Demonstrable need for labour on even “pure” efficiency grounds must not deter the obeisance to the god of staff cuts; “*we started playing a game around people numbers*”. This leads us to a condition where there is no-one left to produce the outputs - but the organisation rolls on.

***“...I guess being a very dollar orientated organisation...”***

Care for the community and employees are attitudes of the past. The aged person who must pay increased prices for their electricity, or suffer even life threatening absence of heating or cooling due to outages, must appreciate that this is the way of the future. Students must realise that intellectual exchanges with academic staff must be minimised in the interests of efficiency. Education and electricity are commodities which must be delivered at the lowest price - caring and community are concepts of the past. Staff who feel ethically concerned about the “modern” way of management must go.

***“that’s a bit of a crazy thing at present moment - we haven’t got any direction”***

Although strategy is never uncontested and unproblematic, the new public sector organisation does not make the mistake of an unambiguous strategy. The organisation will flow where the dollars flow. The only objectives are to position the organisation where the money flows. There is no person, service or community that must stand in the way of change: *“there would be no sacred cows”*.

***“to convince the troops that you have to change”***

Change becomes a goal in itself. Some managers promise that this is the last change-but promises are broken and the whole process starts again. The only end in sight is more change - centralisation to decentralisation, decentralisation to centralisation. Schools within the university are split-off and remerged. The final curtain is followed by Act One of the same play - but the actors have changed, there is less of them, and the play must be performed faster to provide more efficient viewing by the audience. Staff just try and keep going: *“Most of them were in survival mode probably fearful of the future, like me ...”*.

***“How could they do this?”***

The “collegial” processes of a university or the “consultative” processes of a government utility are no obstacle to senior management. Incredulously the manager at the electricity utility reflects on the destruction of some of the fabric of his organisation - “how could they ...”. The same question is left unanswered in the university. The inevitability of the destruction of knowledge and skill and of the quality of services is accepted. The process is not driven by the organisation - but by the State government, the Federal government, international forces - the list of blamebearers goes on.

Why do we repeat the same mistakes? Now I have witnessed it twice - once from the side-lines now in the middle - intelligent, rational decision-makers making irrational short-run decisions. Accounting rather than enabling, produces reports which require immediate action. In the long-run electricity systems collapse, university education deteriorates. In the short-run, cash flow is improved and borrowings are paid off.

My experience as a researcher as a bystander should have prepared me for a similar experience. The researcher however can retain some emotional detachment. The people leaving are not their colleagues, the managerial decisions are not their managers’ decisions, the systems are not their organisation’s systems. This detachment masks the sameness of pressures - of ideology, of external political forces, of financial expediency. There is reason to generalise beyond the case - to see past research experiences as the lives of others tomorrow - “there is no new thing under the sun”.